The NEW NAVY of the United States

Oct.

A Remembrance to Emma
From Brother Will.

1916

THE NEW NAVY
OF
THE UNITED STATES

By

N. L. STEBBINS

Introduction by
THE ADMIRAL OF THE NAVY GEORGE DEWEY, U. S. N.
With a Supplement on
THE REVENUE CUTTER SERVICE
And an Article by
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PREFACE

IN presenting this collection of pictures of Our New Navy, it is hoped that it may to some extent aid in bringing home to the people of the United States a realization of the progress that has been made during the last twenty-five years in building up a force of defenders upon the sea which is second in power to but one nation on the globe, and in its personnel—from its highest officer to its lowest seaman—second to none.

With few exceptions, these pictures are reproductions of photographs made by the Author personally, many being the official photographs made at the trials of the ships, and in the compilation of the work he has received great encouragement from the officials of the Navy Department and the officers of the Service. He is especially indebted to the Bureau of Construction and Repair for the use of its publications and for data furnished. He also wishes to acknowledge the assistance rendered by the officials of the Revenue Cutter Service in furnishing data for the portion of the book relating to that service, which is so valuable an adjunct to the Navy in time of war and in peace is of such invaluable assistance to the shipping along our coasts. The aim in every case is to show representative types, photographs of all the vessels not being procurable.

The thanks of the author are also due to the Fore River Shipbuilding Company and the Electric Boat Company for photographs and information furnished.

The data accompanying the pictures has been compiled from official publications, and carefully revised and corrected by competent authority. The Author therefore hopes that the volume may not only prove of interest to the general public, but may be considered a reliable book of reference by those immediately interested in Naval affairs.

N. L. STEBBINS.
Boston, 1912.

INTRODUCTION

By

THE ADMIRAL OF THE NAVY

In addition to their patriotic appeal, the photographs published in this volume are entitled to general interest for the reason that they illustrate a development in naval ship building unrivaled in any equal period of the world's history.

The increase in the tonnage of ships—from 3,000 to 27,000 tons—is a convenient index of this development; but, considered by itself, it gives a meager conception of the changes that the past thirty years have wrought. The vast bulk of our latest battleships is but incidental to the creation of the modern weapons of naval warfare that are mounted on their decks. The size of ships has grown in pace with the growth of naval ordnance: to support our own guns and to carry armor that shall repel the assault of our enemy's batteries. Modern guns were conceived to meet the possibilities of modern powder, and modern turrets to manipulate those modern guns. Modern powder might never have been thought of but for modern armor, with which old powder could no longer compete. To propel the mass that carries our modern guns and modern armor comes power from modern boilers; with modern engines to harness and apply it. And so the story goes—like the "House that Jack Built."

To the young men of to-day, and particularly to those beginning a career in the navy, there should be a stimulus for the imagination in the history which these photographs present. There is a deeper message—and one which we strive to communicate—for those of us who have seen the electric ammunition hoist developed from the powder monkey, and the automobile torpedo substituted for the cutlass as the last resort in "hand to hand" engagements.

March 12, 1912.

George Dewey

HISTORICAL

After the Civil War our country was busily occupied with the development of its internal resources, and for a long period no appropriations were made for increasing the Navy—ships and guns were of the Civil War period with the deterioration due to age and use.

Other countries, particularly England and France, profiting by the lessons of our war, were replacing their wooden ships with ironclads. The Bessemer process so lessened the cost of production of steel, that it soon replaced iron in ship and gun construction.

Our wooden ships with cast iron smooth bore guns were exchanging courtesies with steel ships armed with breech-loading rifles, flying the flag of small nations, while the wealth and resources of the United States were the envy of every nation of the globe; in fact, our excess revenue was banking up the currency of the country in the treasury vaults, and unless some legitimate means of increasing expenditures was adopted, the revenue from import duties would have to be reduced.

Persistent effort of Naval Officers aroused public interest in the Navy, and in 1883 Congress authorized the construction of three cruisers and one despatch boat to be built of domestic steel. John Roach, Chester, Penna., was awarded the contract, and the construction of our new Navy began.

The first of these vessels to be completed, in 1885, was the despatch boat "Dolphin" of moderate speed and armed with one 6-inch rifle and a few rapid-fire guns, and it is interesting to note that her first commanding officer was Commander George Dewey, now the Admiral of the Navy, who thus introduced to the world The New Navy and has now honored this volume by writing its introduction to the public.

Afterward, in 1888, the "Dolphin" was despatched on a trip around the world, being absent for about two years. At this time, in common with other vessels of the Navy, she was painted black, and when in the Indian Ocean the heat in the quarters below decks was almost unbearable. Her commander at that time, Commander G. F. F. Wilde, ordered the top-sides painted white, with the result that the temperature was reduced a number of degrees. This was really the inception of the idea that resulted in the "White Squadron," white shortly being adopted as the color for the vessels of the Navy in time of peace.

In 1908 the present slate color was permanently adopted for all vessels of the Navy. It makes the vessel much less conspicuous when at sea and is more economical.

The "Dolphin" was soon followed by the cruisers "Atlanta," "Boston" and "Chicago," and later by the "Yorktown." These vessels formed what was known as the Squadron of Evolution, popularly called the White Squadron, and were later joined by the "Baltimore," "Philadelphia," "San Francisco" and "Newark," larger vessels, with heavier armaments. This squadron, with its cruises along the Atlantic seaboard calling at the principal ports, attracted much attention and awakened a new interest in our Navy.

In 1893 the armored cruiser "New York" was completed and, representing as she did the latest ideas in purely American design and construction, aroused great interest in foreign navies. When, at the opening of the Kaiser Wilhelm Canal, at Kiel, Germany, in 1895, the great naval powers each sent several of their latest ships to participate in the celebration, the "New York" in command of Captain—afterwards Rear-Admiral—Robley D. Evans, was flagship of the

U. S. Squadron, and, by reason of her general appeearance and many new appliances, elicited much favorable comment from the representatives of other nations.

She was visited by many naval officers and others of high rank, including the German Emperor, from whom the electric installation for light and ventilation called forth special commendation.

The evolution of the American battleship now commenced with the "Texas" and the "Maine," followed by the class represented by the "Massachusetts" and the "Oregon," the latter of which, in 1898, gave such a splendid example of the efficiency of our Navy's personnel by her run from San Francisco to the Gulf of Mexico, stopping only for coal, and reporting to Admiral Sampson, on her arrival, in perfect condition and ready for any service.

This battleship fleet has been increased from year to year, the vessels increasing in size, speed and weight of armament, until we have arrived at the class of the "Florida" and the "Utah," of over 21,000 tons, now in commission, with the latest authorized, the "Oklahoma" and the "Nevada" of 27,500 tons, each carrying ten fourteen-inch guns, just contracted for. These last two vessels will be fitted for the use of oil exclusively, for fuel.

Meanwhile in the other classes of vessels the advance has been equally rapid. Armored cruisers may be likened to a battleship in which the defensive qualities are decreased by reducing the thickness of the armor protection and the offensive qualities, and by reducing the size of the main battery guns. The weight thus saved goes to machinery and fuel supply, thus increasing the speed and steaming radius. Of this class we have an effective fleet, represented in its latest development by vessels of the types of the "Colorado" and the "North Carolina."

Protected cruisers, such as the "Charleston," have still less armor—merely sufficient, in fact, for the protection of the machinery.

The latest additions to our cruiser class are the three scout cruisers "Birmingham," "Salem" and "Chester," with a speed of twenty-five knots, or more. These vessels are designed primarily, as their name implies, to act as scouts for the battleship fleet, scouring the sea in search of the enemy, and, having located him, to carry the information at their highest speed to the commander of the battleships. Advantage was taken of the similarity of design in these three vessels to test out the Parsons and Curtis turbines, as compared with the ordinary reciprocating engines.

The torpedo has now come to be reckoned the most formidable of the naval weapons of offense, and from its adoption has been evolved the great fleet of vessels adapted to its use which now forms such an important part of every modern navy.

The first torpedoes were explosives carried in a metal case on the end of a spar in the bow of a launch, and exploded on contact or by a lock string. It was with a torpedo of this type that Lieutenant Cushing, U.S.N., blew up the Confederate ironclad "Albemarle." The torpedo now in most general use, the Whitehead, is twenty-one inches in diameter and over sixteen feet long, and charged with about 200 pounds of gun cotton. The introduction of these torpedoes led to the construction of torpedo boats, small enough to be inconspicuous, and of great speed to enable them to dash forward when discovered and get within effective range before being destroyed.

Our first step ,in establishing a fleet of these boats was the purchase by the Government of the steam yacht, "Stiletto," a speed boat built as an experiment by the Herreshoffs. This led to a placing of an order with the same firm for our first torpedo boat, the "Cushing," which was one hundred and thirty-nine feet long, one hundred and five tons displacement, with a speed of twenty-two knots, a battery of three one-pounders and two torpedo tubes, while the latest type of destroyer, of which several are now under construction, is three hundred feet long, and over one thousand tons displacement. They have five four-inch guns and three twin eighteen-inch tubes, with a speed of over thirty knots. The later boats of this class have been fitted for burning oil for fuel, it having proved superior to coal.

The torpedo boats were a formidable addition to harbor defense in their menace to an attacking or blockading fleet, which led to the installation on the ships of numerous searchlights to render the detection of their approach possible, while rapid-fire guns, mounted to command any angle of approach, were provided to give a hail of shells to destroy them.

The torpedo boats, on account of their small size, were restricted to the vicinity of the coast, and a larger type of vessel, having greater speed and termed torpedo boat destroyers, was built to accompany the battleships to sea and act as a protection to the larger vessels against the attacks of the torpedo boats.

Man has long striven to produce a boat that could be navigated under water, and with modern means of propulsion—the internal combustion gasolene engine and electricity—this has been at last accomplished. In the submarine torpedo boat, of which our Navy includes a large fleet, the dream of Jules Verne, as portrayed in his novel, "Twenty Thousand Leagues Under the Sea," seems close to realization.

These craft have, as shown in the illustrations, a round pointed hull, with a low, flat deck and conning tower, and torpedo tube in the bow. They are propelled on the surface by gasolene engines, and below the surface by electric motors run from storage batteries, giving a speed on the surface of about fourteen knots and submerged, nine knots. When running a short distance below the surface of the water a tube called a periscope, carrying mirrors, projects above the surface and gives a view of the horizon.

In addition to the types of vessels above enumerated, all navies have a number of vessels of varying size known as gun boats. Ordinarily our vessels of this class are employed in looking out for American interests in various parts of the world, particularly in West Indian, Central American and Chinese ports. Some of them, such as the "Helena," are of very shallow draft for service in rivers and are fitted with military masts carrying rapid-fire guns for firing over the river banks.

A necessary accompaniment to the battleship fleet are auxiliary vessels to carry supplies, etc. The most important of these are the colliers, the latest type of which is the "Neptune" class, which are each capable of carrying twelve thousand tons of coal for the fleet. Then there are the supply ships carrying stores, and fitted with refrigerating plants, and the hospital ships, fitted for the care of large numbers of sick. Also a repair ship, fitted as far as possible, for doing the work of a machine shop.

All these various classes, when gathered together in one homogeneous whole, form that wonderfully powerful arm of modern warfare, the Fighting Fleet.

In armaments, the growth in size of guns in recent years may be realized, when it is said that the heaviest guns in our fleet in the battle of Santiago were thirteen-inch, of thirty-five calibers, or thirty-eight feet in length, throwing a projectile weighing 1,100 pounds, while those of the latest type of battleship are fourteen inch, of forty-five calibers, or over fifty feet long, throwing a projectile weighing 1,400 pounds, and with an extreme range of about twelve miles.

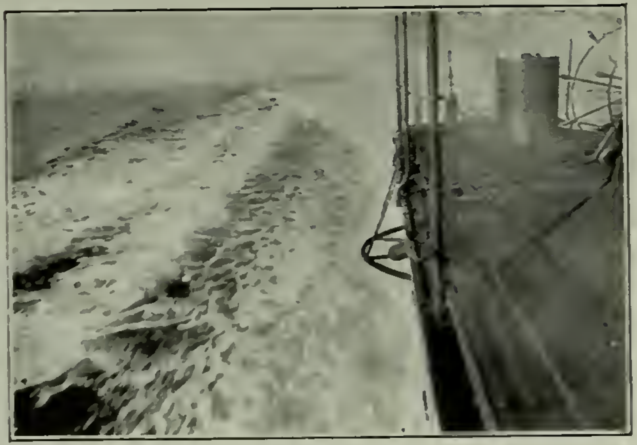
In machinery and boilers the advance has been as great as in other lines. The old horizontal reciprocating engine has been replaced by the modern vertical triple expansion, which, in turn has been followed, though not yet supplanted, by the turbine, of which the Parsons, an English invention, and the Curtis, a purely American product, are the best known types.

In boilers the cylindrical, or Scotch type, has been almost entirely supplanted by the watertube boilers, of which the Babcock and Wilcox, of American manufacture, is probably the most familiar. In this type of boiler the water is in small tubes so arranged as to form a fire box, and on account of the great heating surface, steam can be quickly raised while the construction allows a pressure of over two hundred pounds.

During recent years much attention has been given to increasing the quality of marksmanship, many days during each practice cruise having been devoted to gun practice, with the result that our record for marksmanship stands ahead of the world.

The efficiency of the engine and fire-room forces has been well illustrated by the run of the "Oregon," before referred to, and by the cruise of the battleship fleet around the world, when the ships returned home with their machinery in as good, or better condition than when they sailed.

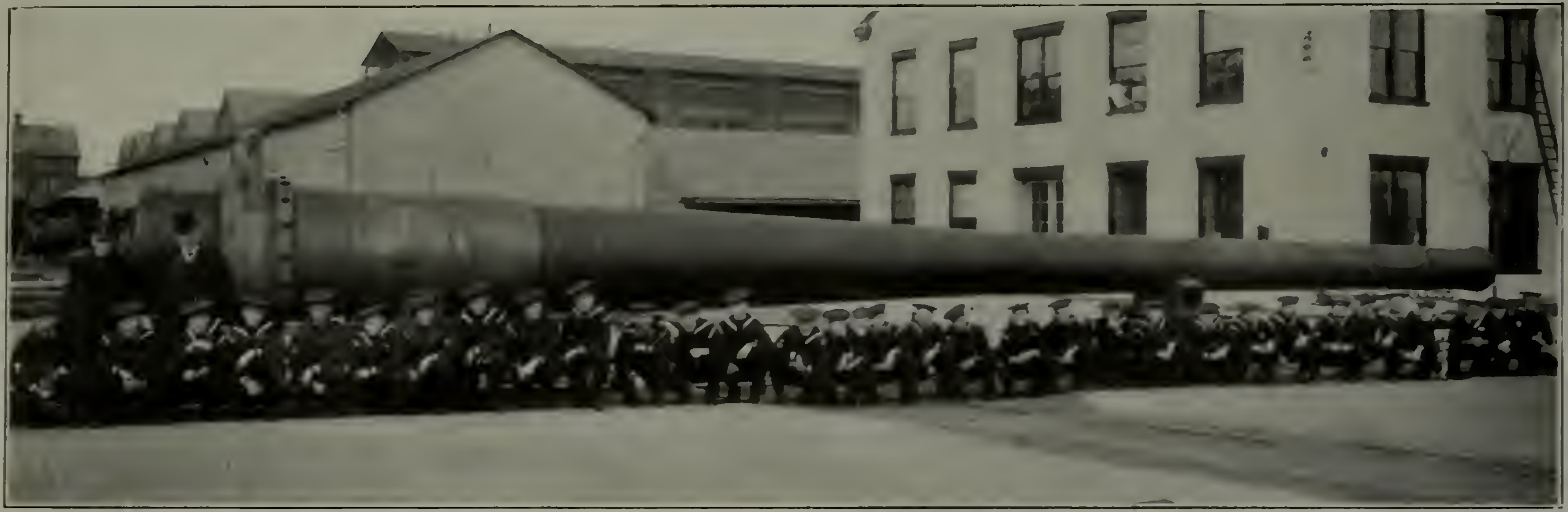
Thus, in the short space of twenty-seven years, has the United States, by the building of a powerful and efficient Navy, risen from one of the least of the naval powers to one of the foremost; and in no better way can this evolution be seen than in the pictures of our fighting ships, from the squadron of evolution down to the new Dreadnaughts, which compose this volume.



"REID"
Showing wake when turning at 32 knots.

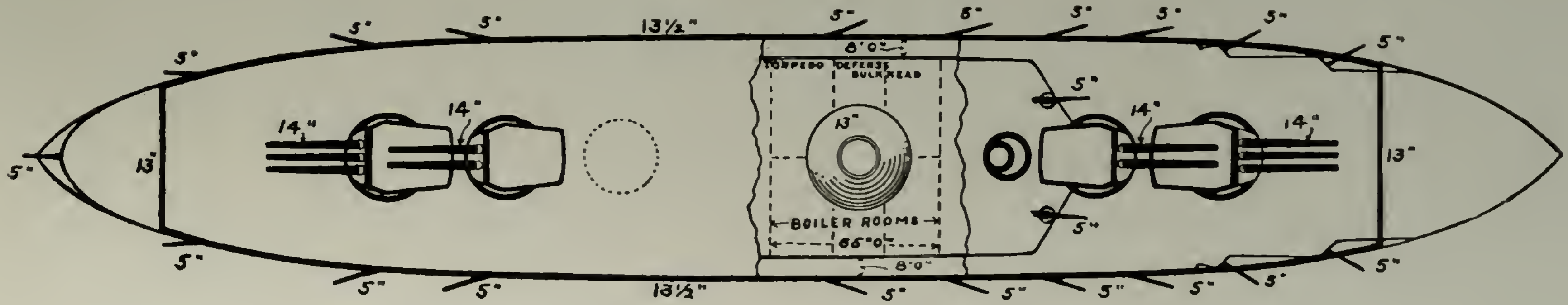
"REID"—HEAD ON

"REID"
Bow wave at 32 knots.

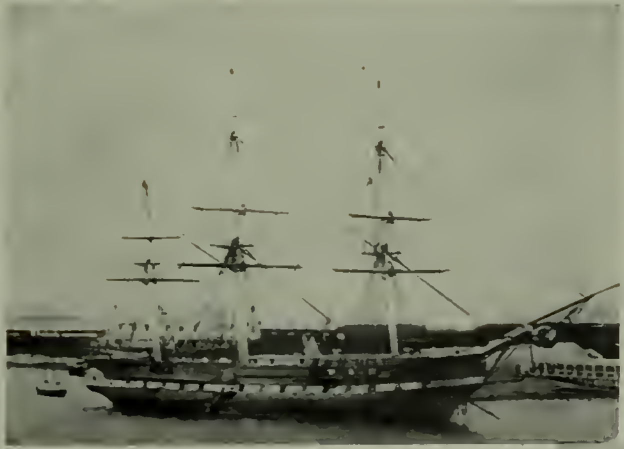


A 14 INCH, .45 CALIBRE GUN

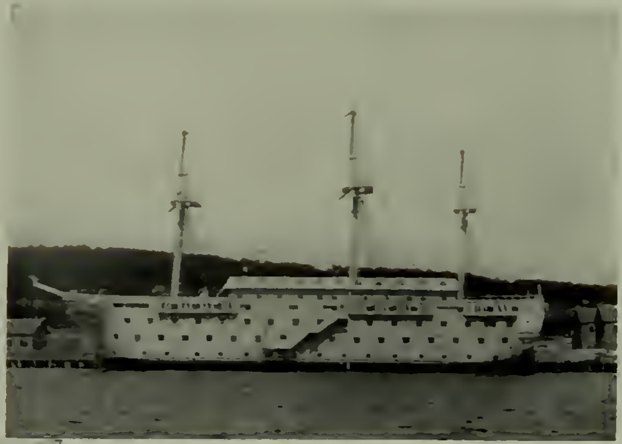
Length 53 feet 6 inches. Weight 63.08 tons. Shell 1400 lbs. Charge 365 lbs. Muzzle velocity 2600 feet per second. Muzzle energy 65,687 foot tons. Cost of firing, (service charge) $700.00. Extreme range 21,000 yards. Cost of gun, $74,700.00. Photograph furnished by Hon. Geo. A. Loud, of Committee on Naval Affairs, for whom it was taken.



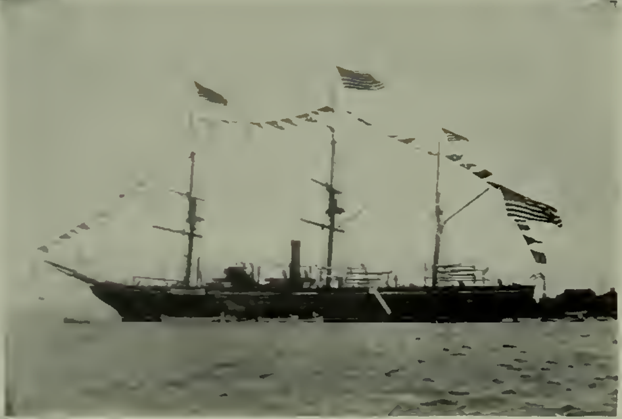
PLAN OF THE NEVADA AND OKLAHOMA SHOWING ARRANGEMENT OF GUNS



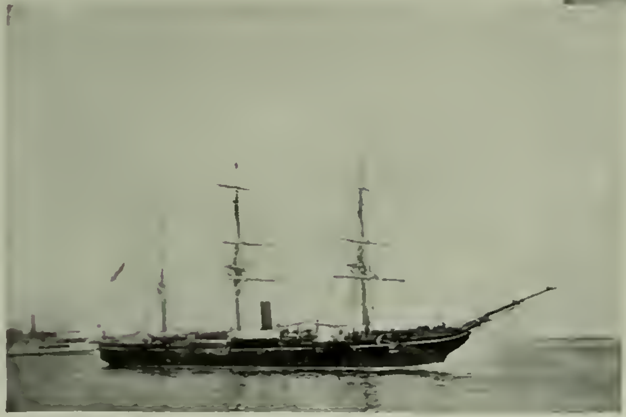
CONSTITUTION
Built in 1797



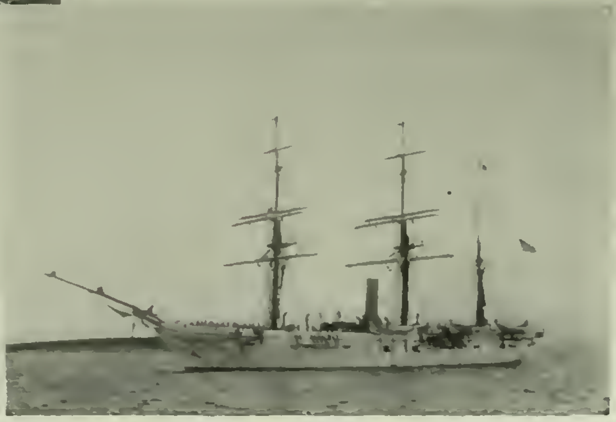
NEW HAMPSHIRE
Built in 1817



HARTFORD
Built 1858

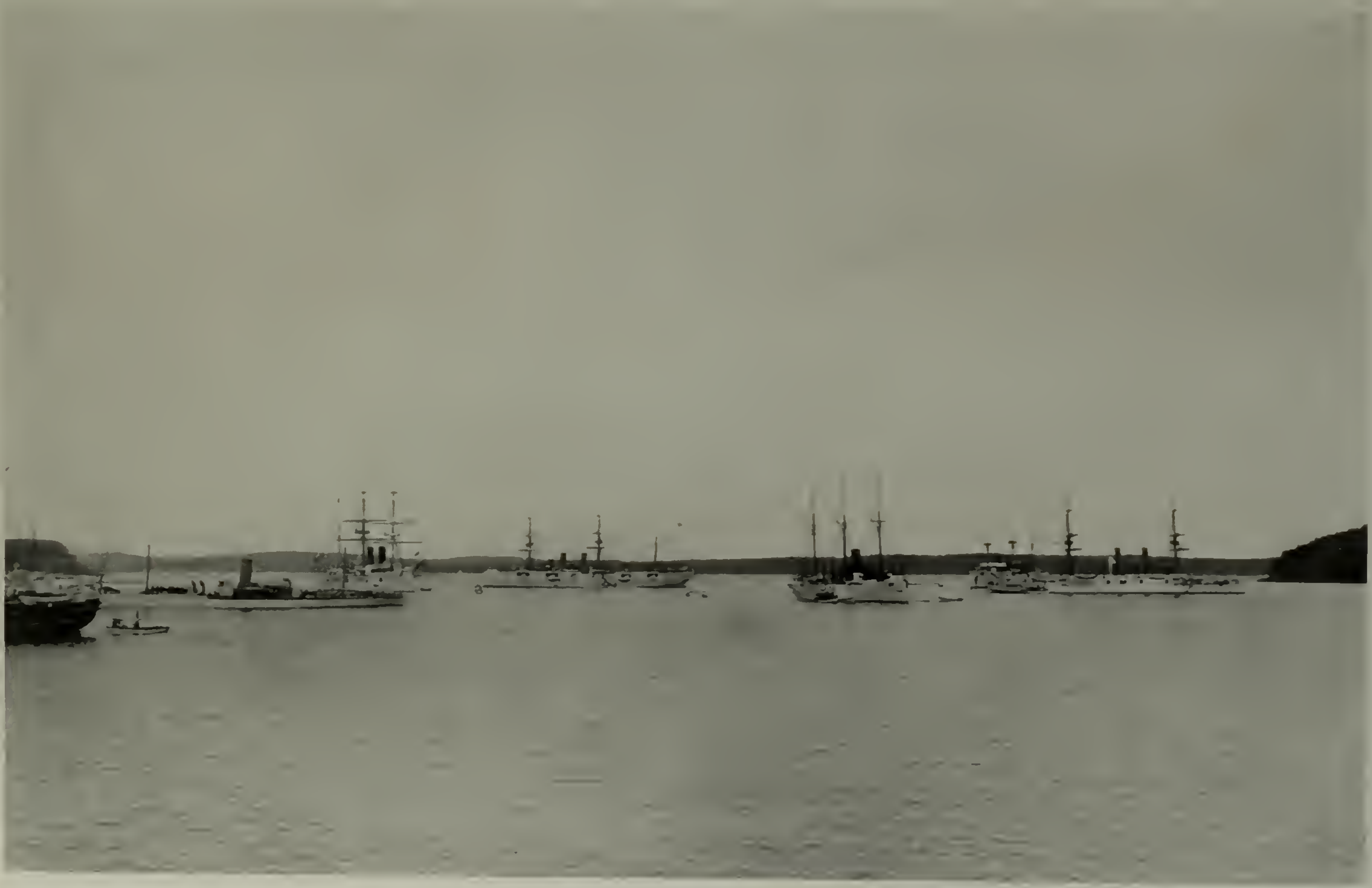


KEARSARGE
Built in 1861

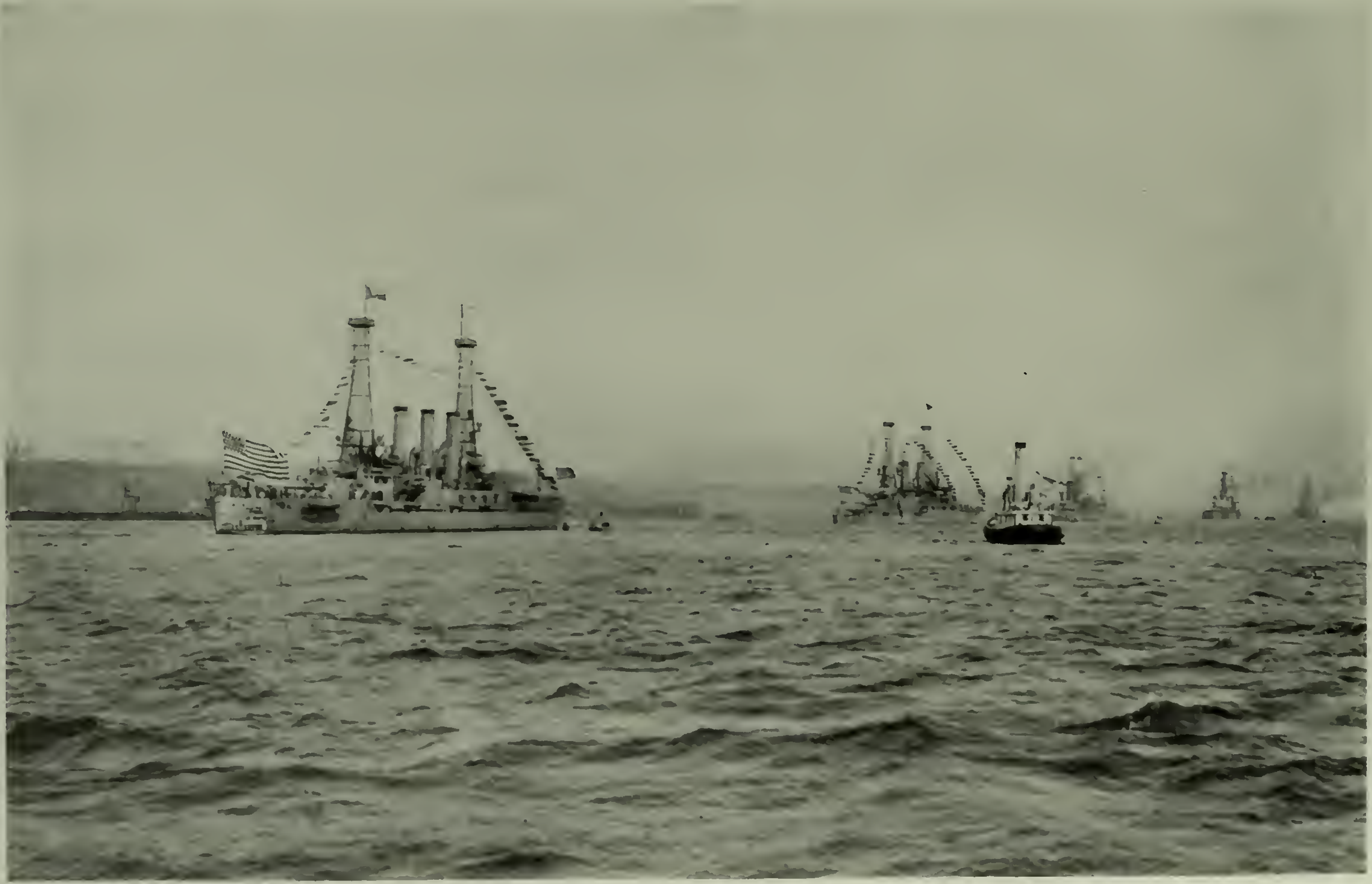


ENTERPRISE
Built in 1876

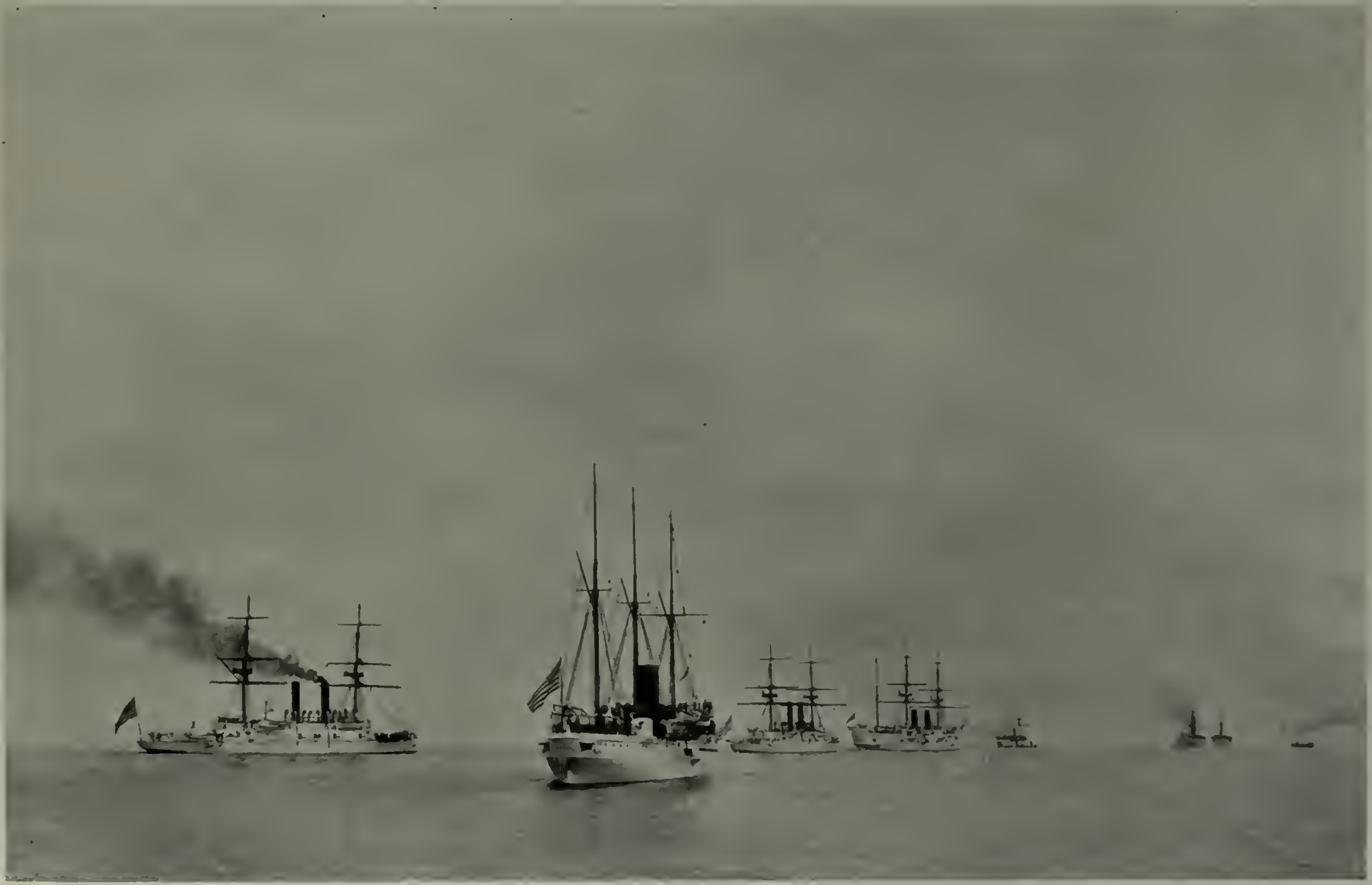
TYPICAL VESSELS OF THE OLD NAVY



SQUADRON OF EVOLUTION (THE WHITE SQUADRON) AT BAR HARBOR, AUG., 1891



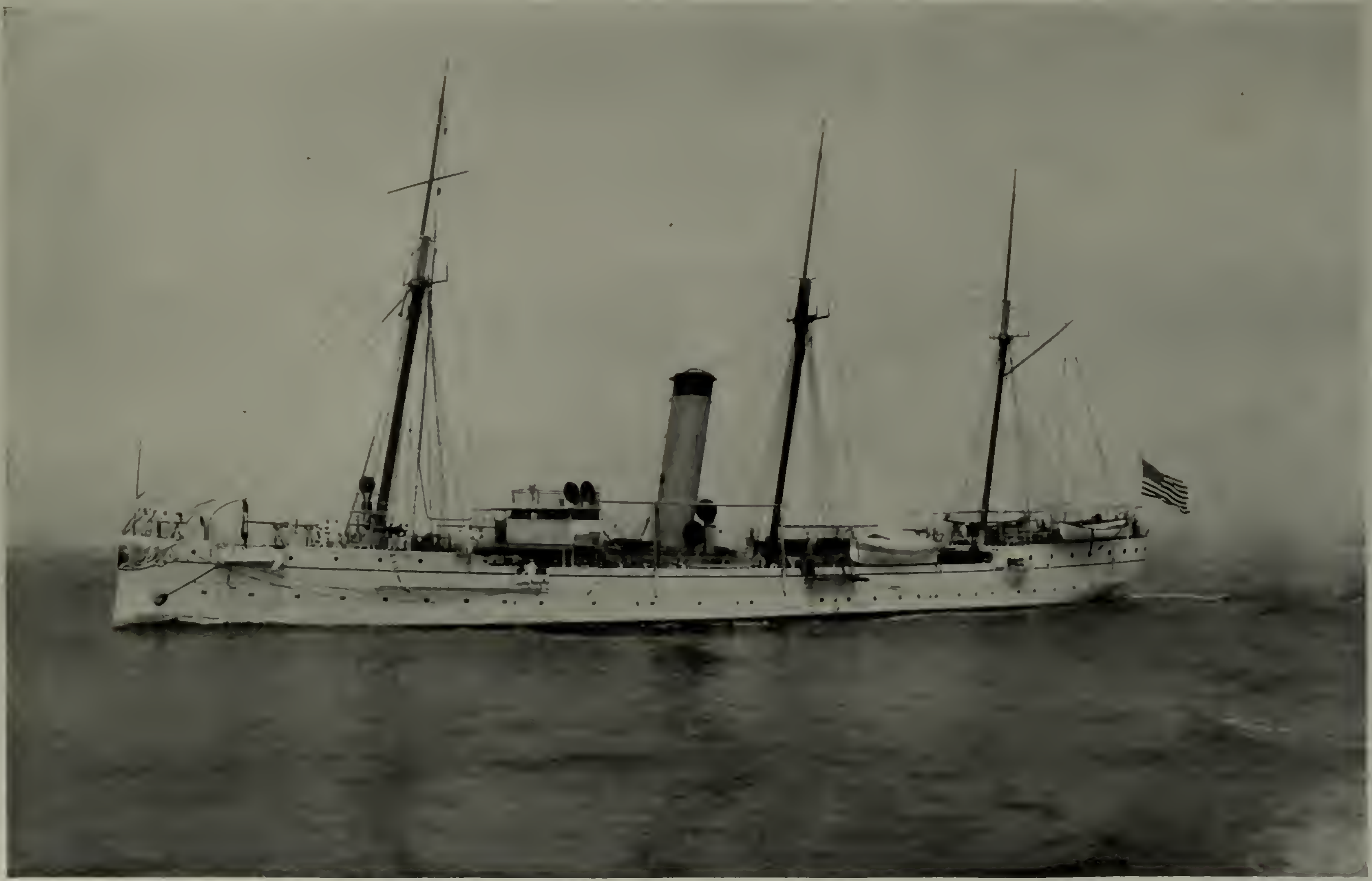
BATTLESHIPS AT ANCHOR IN HUDSON RIVER, NEW YORK, NOV. 2, 1911



SQUADRON OF EVOLUTION, LEAVING BAR HARBOR, AUG. 26, 1891

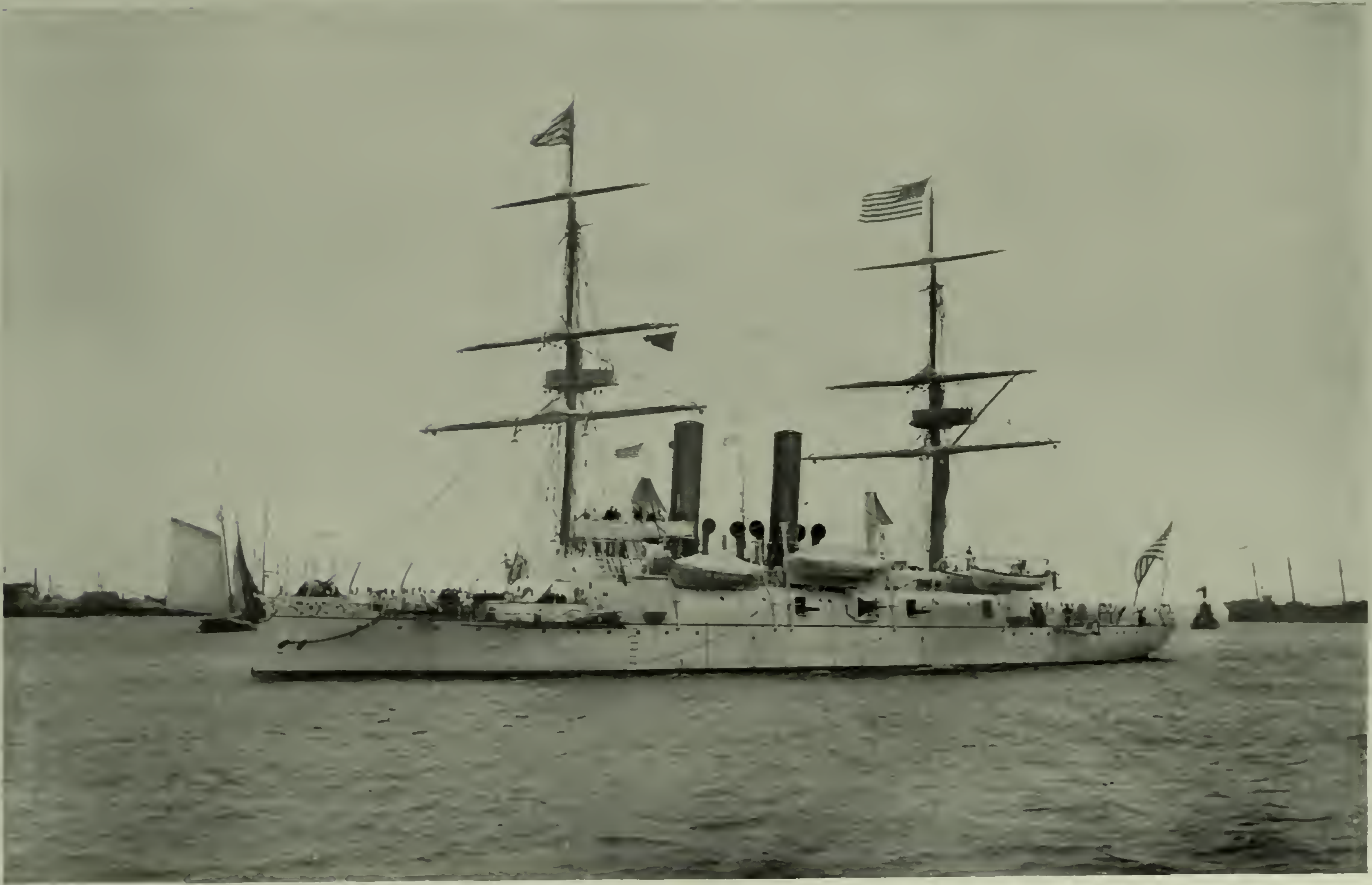
Copyright, Pictorial News Co., 1907

BATTLESHIP FLEET, LEAVING HAMPTON ROADS, 1907



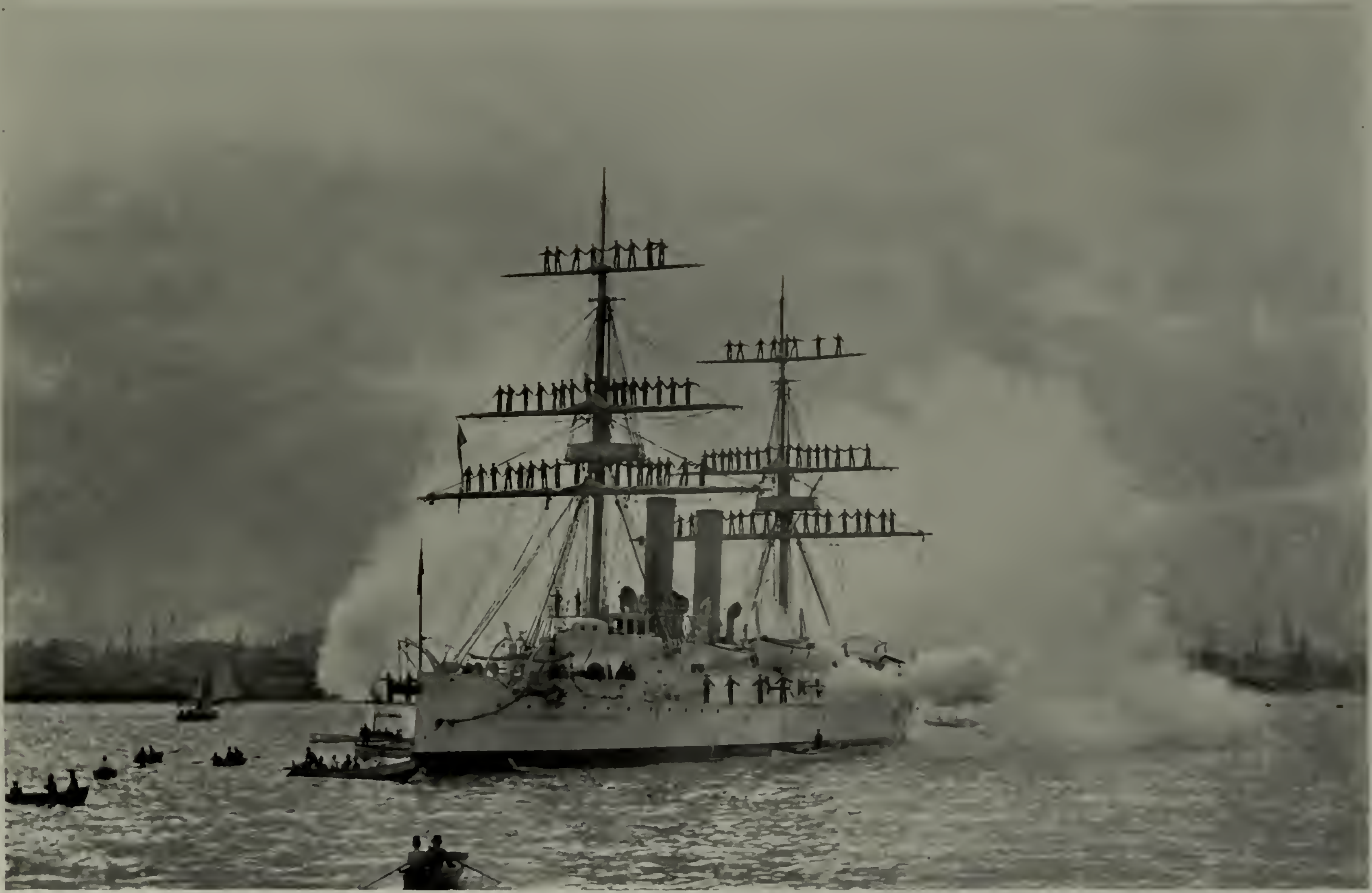
DOLPHIN (Gunboat)

Displacement, 1,486 tons. Length, 240 feet. Beam, 32 feet Draft, 14 feet 3 inches. Horsepower, 2,253. Speed at trial (mean), 15.50 knots. Armament, two 4-inch, under 4-inch nine. Complement, 8 officers, 144 men. Built by John Roach, Chester, Pa., 1885, Photograph taken, 1903. Assigned to special service as despatch boat.



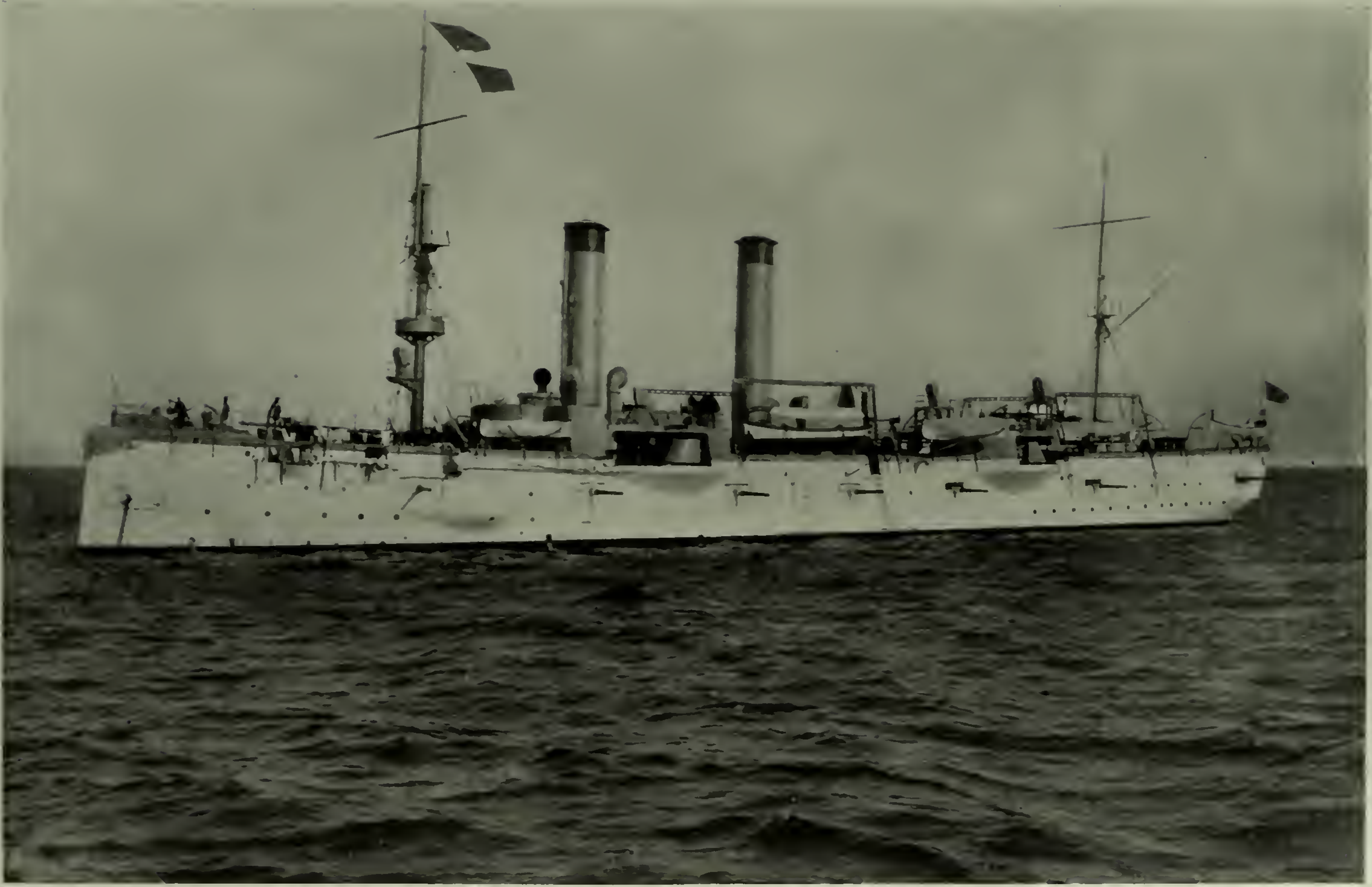
BOSTON (Protected Cruiser)

Displacement, 3,000 tons. Length, 277 feet 5 inches. Beam, 42 feet 2 inches. Draft, 16 feet 10 inches. Engines, 1 horizontal compound; boilers, 8 Scotch. Horsepower, 4,300. Speed at trial (mean), 15.6 knots. Armament, two 8-inch; six 6-inch, under 4-inch thirteen. Complement, 22 officers, 250 men. Built by John Roach, Chester, Pa., 1887. Photograph taken, 1891. At battle of Manila Bay, 1898. Same class, Atlanta. Assigned to Oregon Naval Militia, 1911.



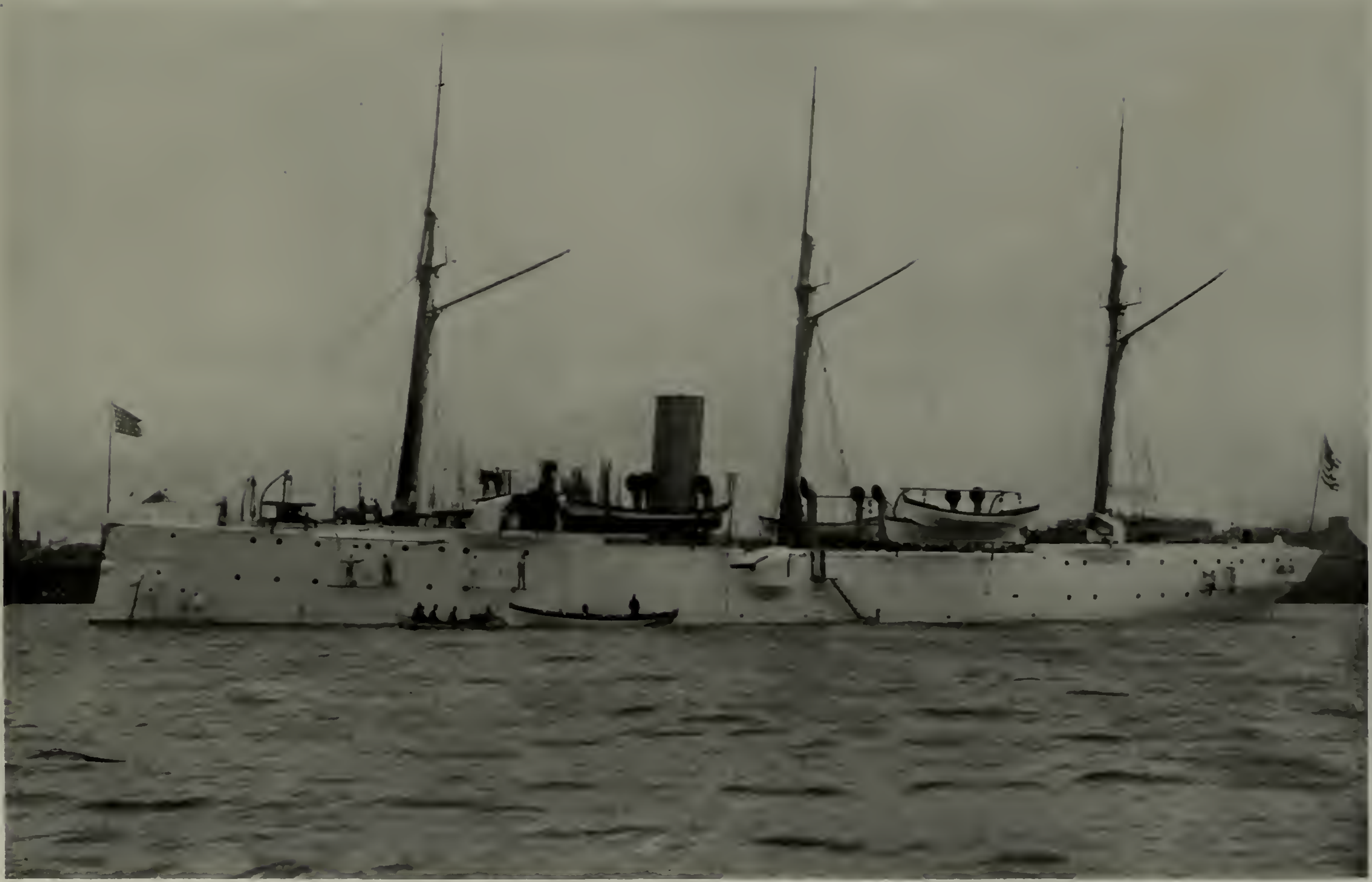
ATLANTA (Protected Cruiser)

Displacement, 3,000 tons. Length, 277 feet 5 inches. Beam, 42 feet 2 inches. Draft, 16 feet 10 inches. Engines, 1 horizontal triple expansion; boilers, 4 Babcock & Wilcox, 2 Scotch. Horsepower, 4,300. Speed at trial (mean), 15.6 knots. Armament, two 8-inch, six 6-inch, under 4-inch thirteen. Complement, 22 officers, 250 men. Built by John Roach, Chester, Pa., 1883. Photograph taken, 1890. Used as barrack ship at Charleston Navy Yard, 1911.



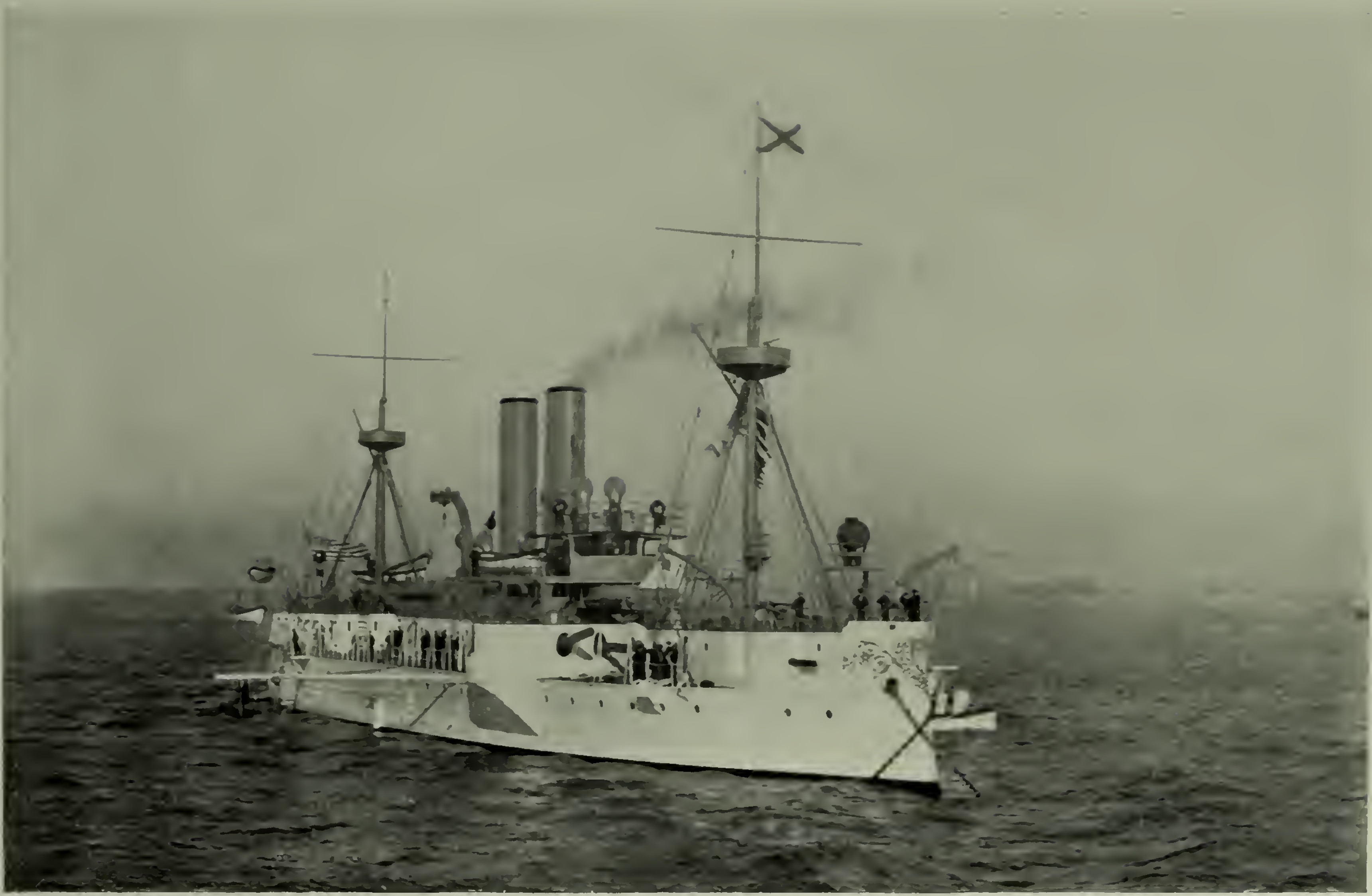
CHICAGO (Protected Cruiser)

Displacement, 4,500 tons. Length, 325 feet. Beam, 48 feet 2½ inches. Draft, 19 feet. Engines, 2 horizontal triple expansion; boilers, 6 Babcock & Wilcox, 4 Scotch. Horsepower, 9,000. Speed at trial, 18 knots (estimated). Armament, four 8-inch, fourteen 5-inch, under 4-inch fourteen. Complement, 18 officers, 411 men. Built by John Roach & Sons, Chester, Pa., 1889. Assigned to Naval Militia, Mass., 1910. Photograph taken, 1903.



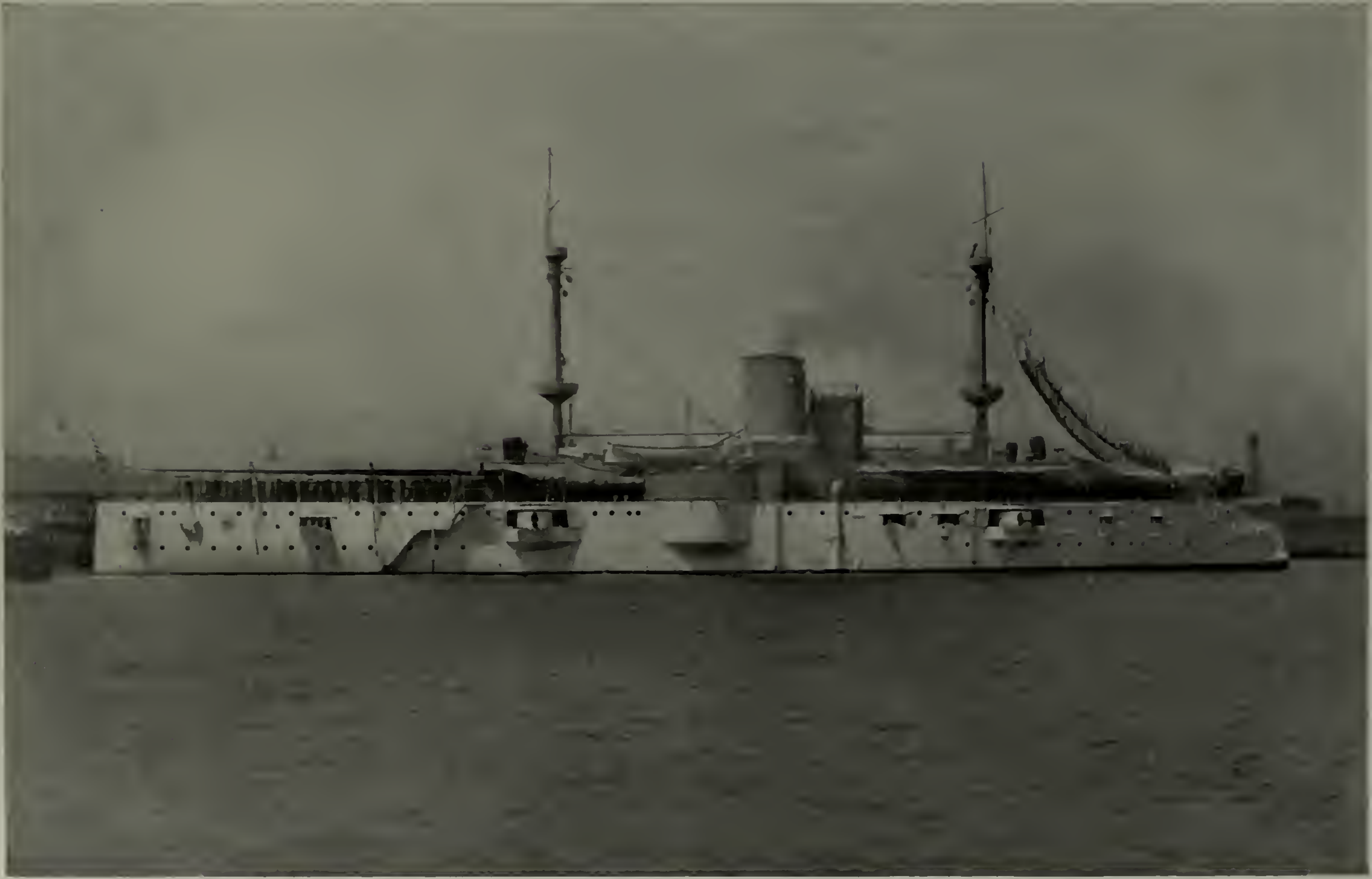
YORKTOWN (Gunboat)

Displacement, 1,710 tons. Length, 230 feet. Beam, 36 feet. Draft, 14 feet. Horsepower, 3,341. Speed at trial (mean), 16.14 knots. Armament, six 6-inch, under 4-inch ten. Complement, 14 officers, 181 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1889. Photograph taken, 1889.



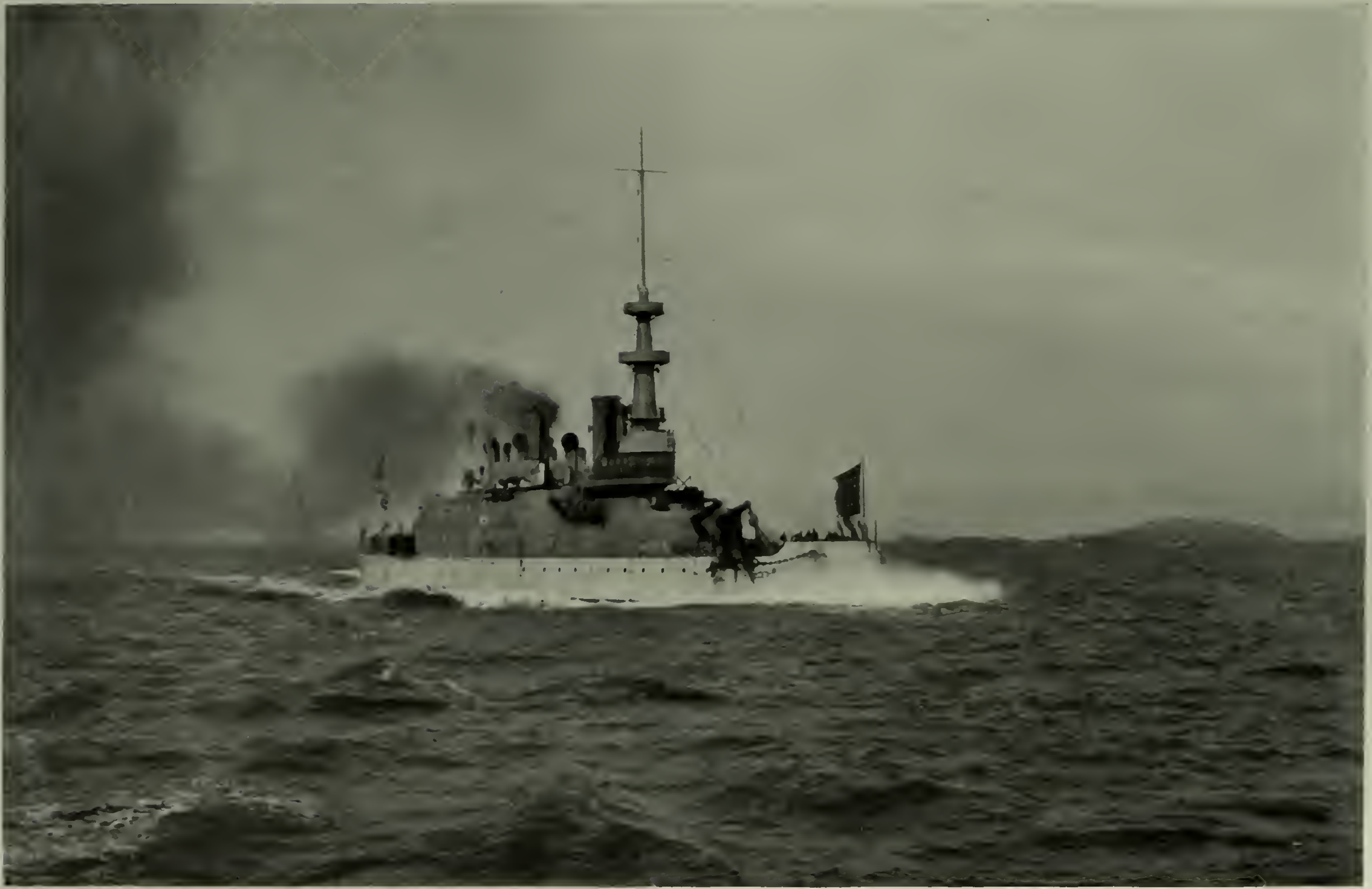
MAINE (Battleship)

Displacement, 6,682 tons. Length, 318 feet. Beam, 57 feet. Draft, 21 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 8 Scotch. Horsepower, 9,300. Speed on trial (mean), 17.45 knots. Armament, four 10-inch, six 6-inch, under 4-inch fifteen. Complement, 31 officers and 343 men. Built at New York Navy Yard, 1895. Photograph taken, 1896. Blown up in Havana Harbor, February 15, 1898.



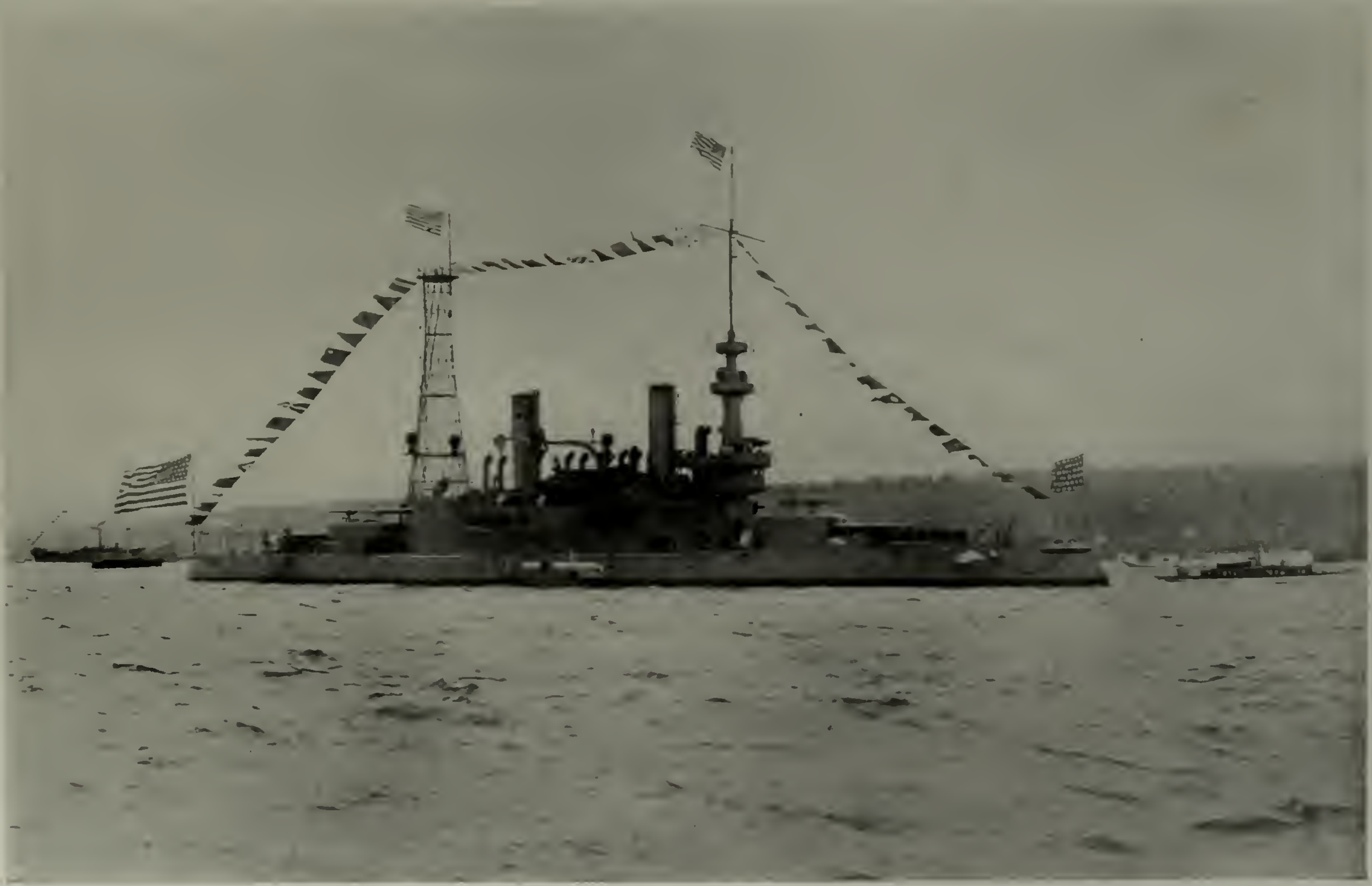
TEXAS (later San Marcos) (Battleship)

Displacement, 6,315 tons. Length, 301 feet 4 inches. Beam, 64 feet 1 inch. Draft, 22 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 4 Scotch. Horsepower, 8,610. Speed on trial (mean), 17.8 knots. Armament, two 12-inch, six 6-inch, under 4-inch twenty-two. Complement, 30 officers and 359 men. Built by Norfolk Navy Yard, Norfolk, Va., 1895. Photograph taken, 1899. Was in battle of Santiago, 1898. Used as target and sunk, 1910.



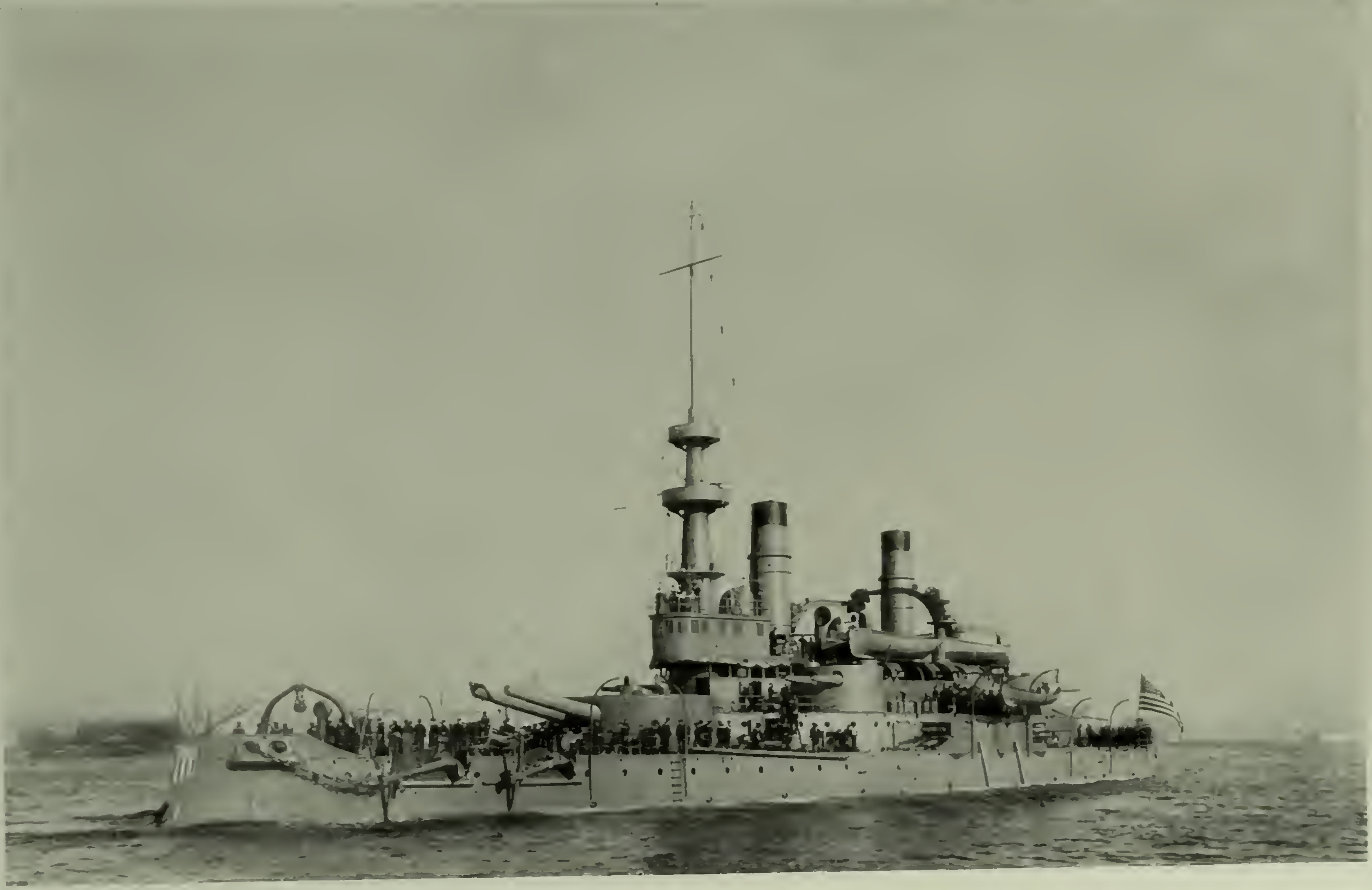
MASSACHUSETTS (Battleship)

Displacement, 10,288 tons. Length, 348 feet. Beam, 69 feet 3 inches. Draft, 24 feet. Engines, 2 vertical triple expansion; boilers, 8 Babcock & Wilcox. Horsepower, 10,240. Speed on trial (mean), 16.2 knots. Armament, four 13-inch, eight 8-inch, under 4-inch sixteen. Complement, 34 officers and 671 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1896. Photograph taken on trial, 1896. Has one cage mast and one military mast, 1911.



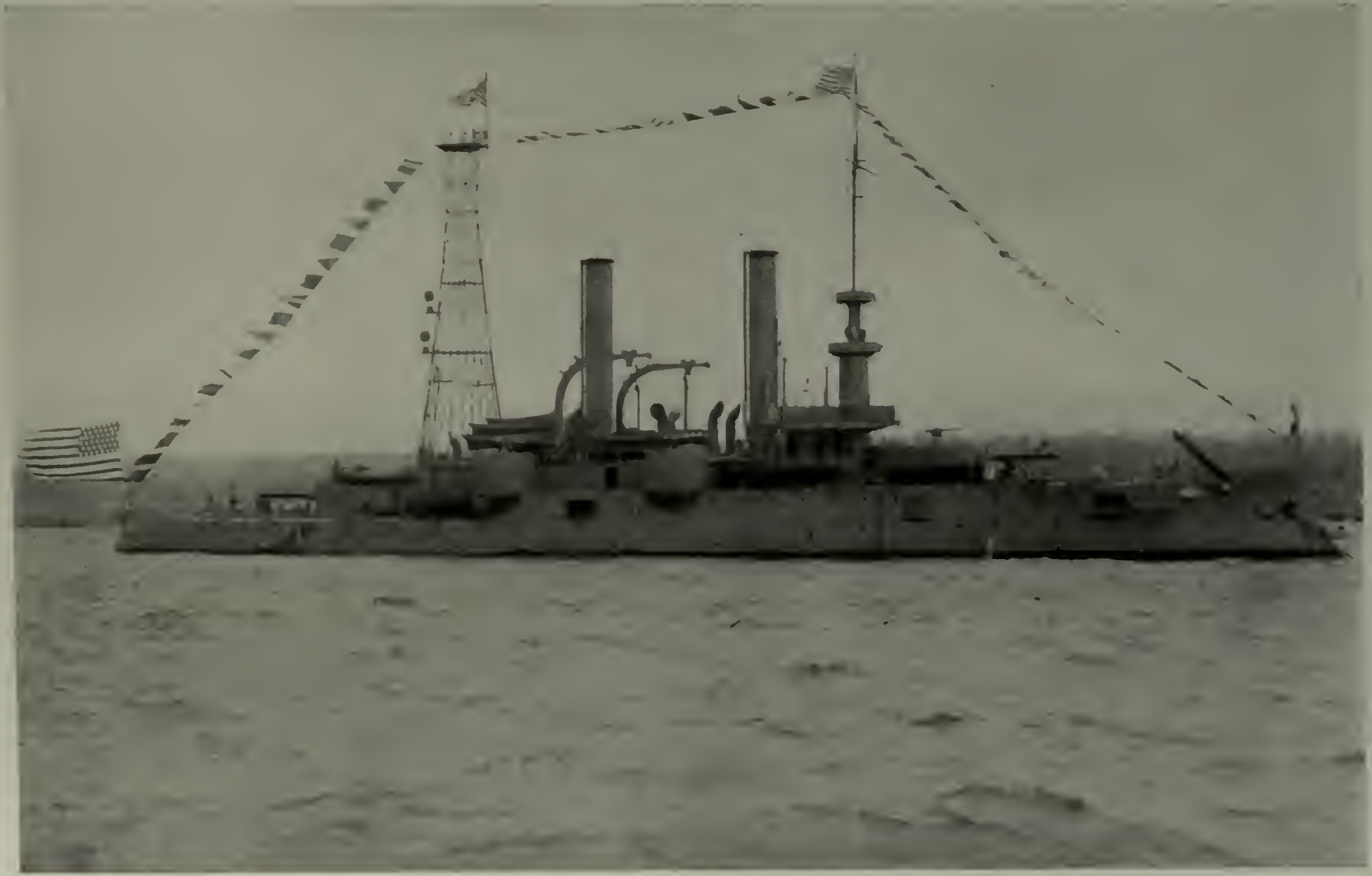
INDIANA (Battleship)

Displacement, 10.288 tons. Length, 348 feet. Beam, 69 feet 3 inches. Draft, 24 feet. Engines, 2 vertical triple expansion; boilers, 8 Babcock & Wilcox. Horsepower, 9,607. Speed on trial (mean), 15.5 knots. Armament, four 13-inch, eight 8-inch, under 4-inch sixteen. Complement, 34 officers, 619 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1895. Photograph taken, 1911. Was in battle of Santiago, 1898. Same class, Massachusetts and Oregon.



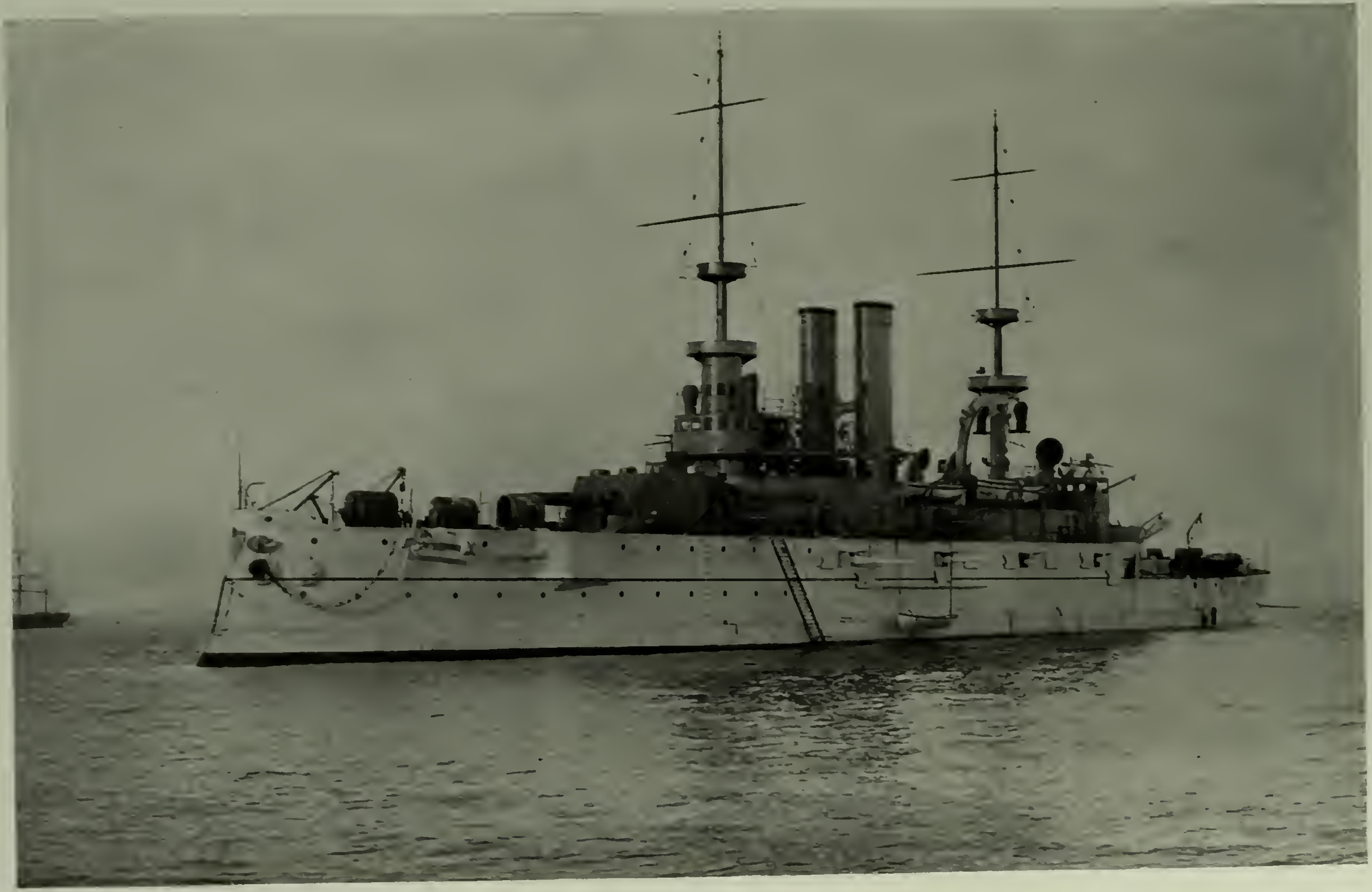
OREGON (Battleship)

Displacement, 10,288 tons. Length, 348 feet. Beam, 69 feet 3 inches. Draft, 24 feet. Engines, 2 vertical triple expansion; boilers, 4 Scotch. Horsepower, 11,037. Speed on trial (mean), 16.79 knots. Armament, four 13-inch, eight 8-inch, under 4-inch sixteen. Complement, 34 officers and 671 men. Built by Union Iron Works, San Francisco, Calif., 1896. Was at battle of Santiago, 1898. Has one cage mast, and one military mast, 1911.



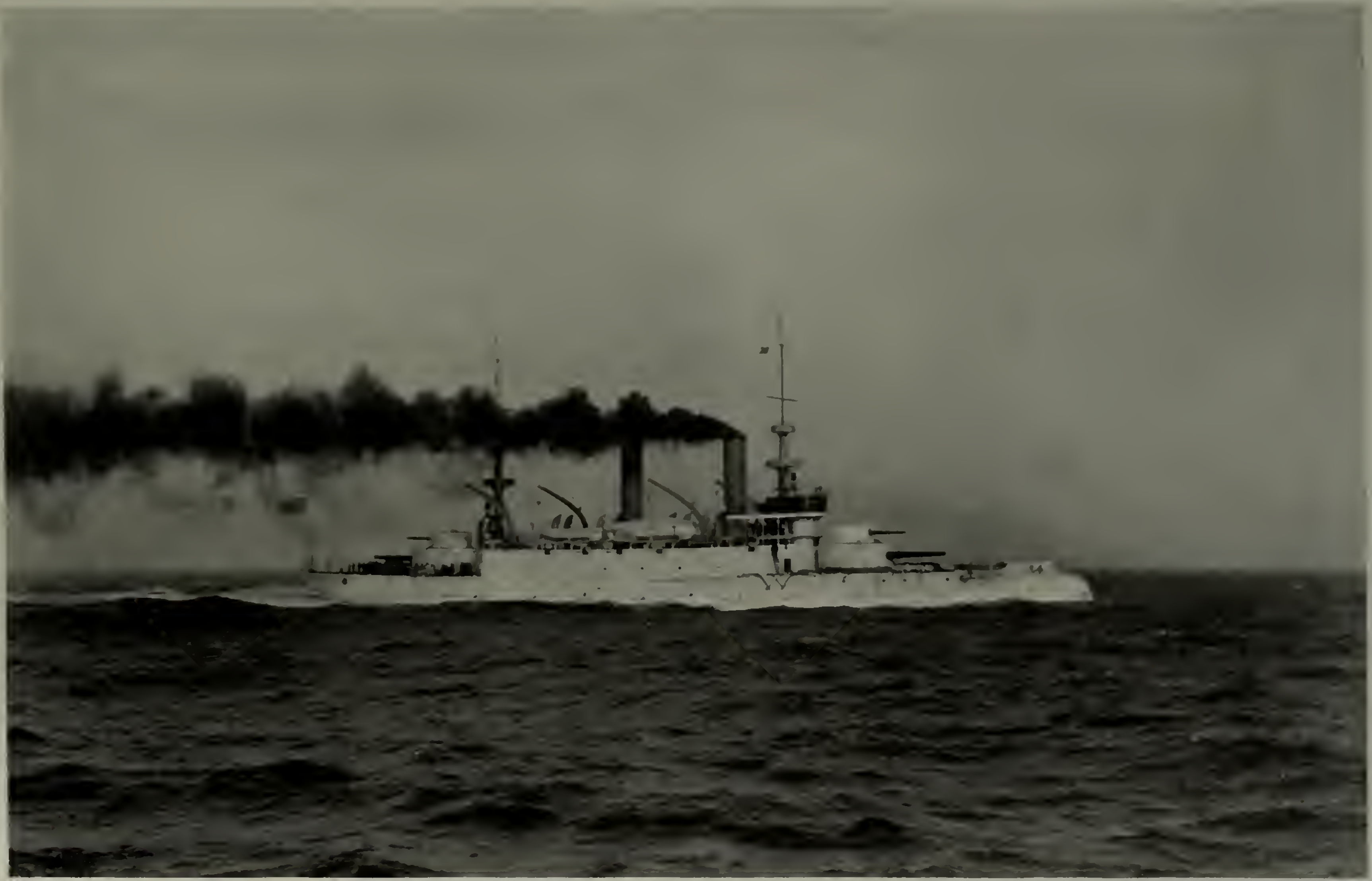
IOWA (Battleship)

Displacement, 11,346 tons. Length, 360 feet. Beam, 72 feet 2½ inches. Draft, 24 feet. Engines, 2 vertical triple expansion; boilers, 5 Scotch. Horsepower, 11,933. Speed on trial (mean), 17.09 knots. Armament, four 12-inch, eight 8-inch, ten 4-inch, under 4-inch four. Complement, 34 officers and 646 men. Built by Wm. Cramp & Sons, Philadelphia, Pa., 1897. Photograph taken, 1911. Was in battle of Santiago, 1898.



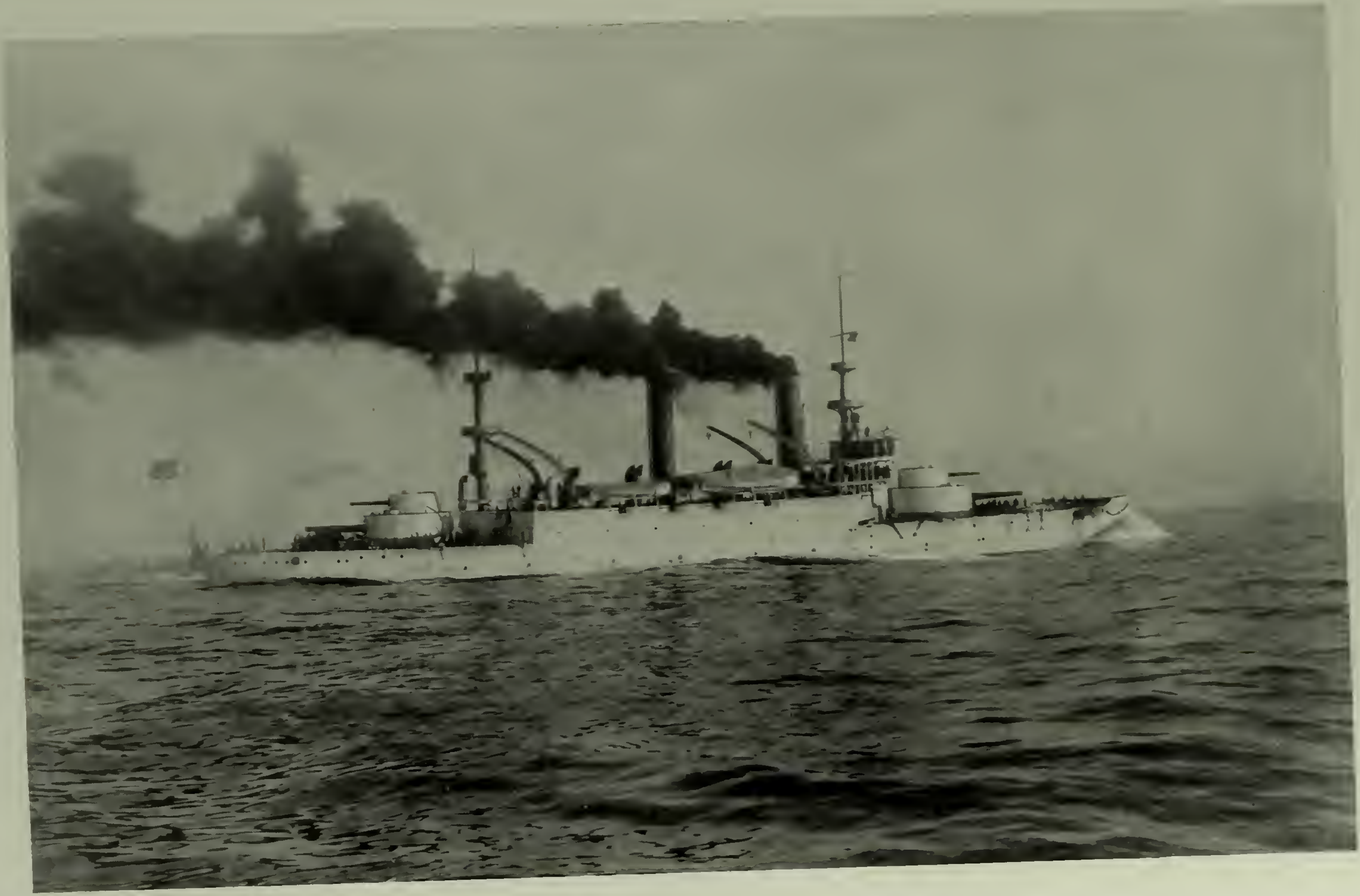
WISCONSIN (Battleship)

Displacement, 11,552 tons. Length, 368 feet. Beam, 72 feet 2½ inches. Draft, 23 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 8 Scotch. Horsepower, 12,452. Speed on trial (mean), 17.17 knots. Armament, four 13-inch, fourteen 6-inch, under 4-inch eight. Complement, 34 officers and 662 men. Built by Union Iron Works, San Francisco, Cal., 1901. Has two cage masts, 1911.



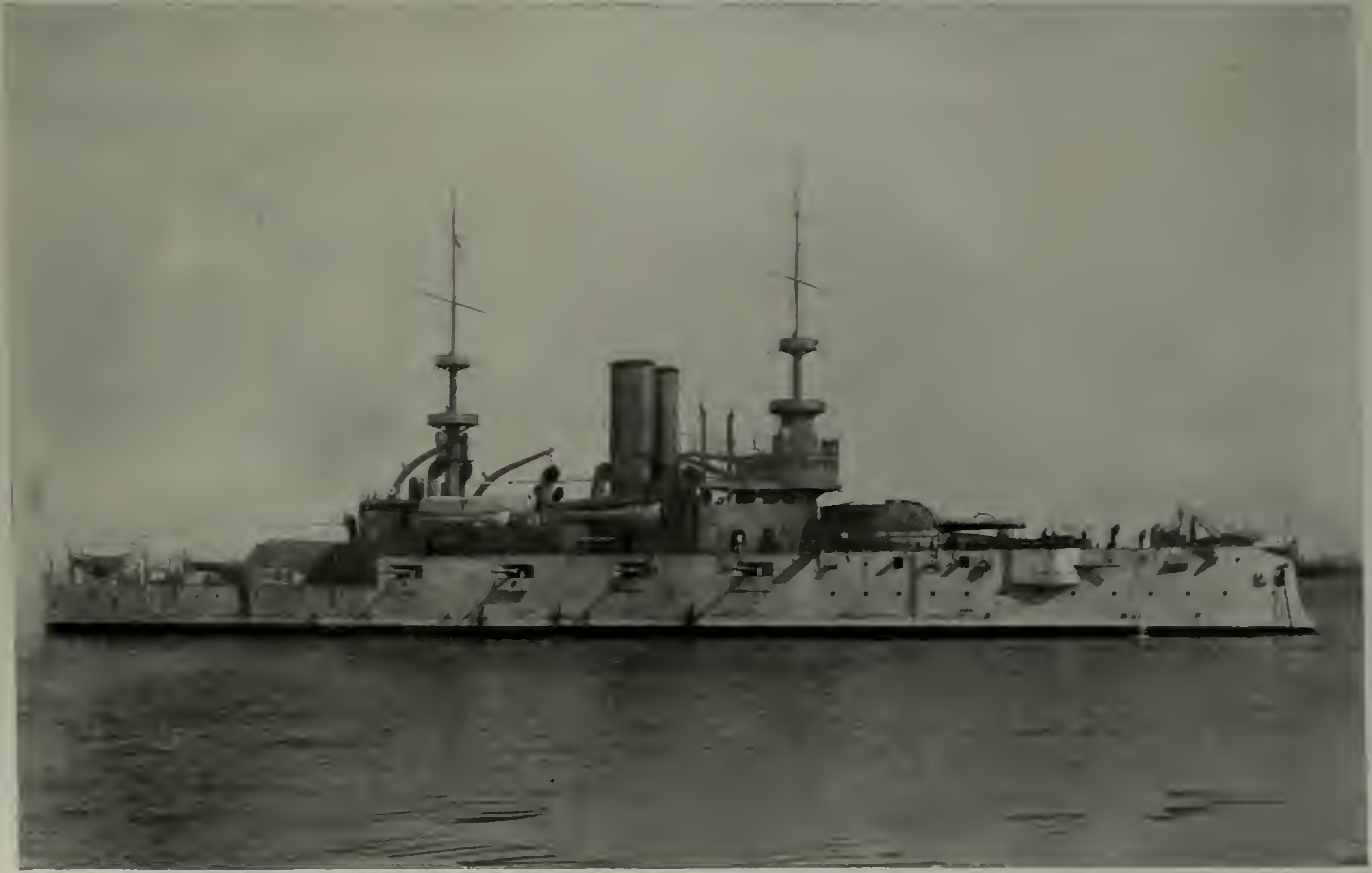
KEARSARGE (Battleship)

Displacement, 11,520 tons. Length, 368 feet. Beam, 72 feet 2½ inches. Draft, 23 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 8 Mosher. Horsepower, 11,788. Speed on trial (mean), 16.82 knots. Armament, four 13-inch, four 8-inch, eighteen 5-inch, under 4-inch four, and one 18-inch torpedo tube. Complement, 34 officers and 691 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1899. Photograph taken on trial, 1899, at 16.82 knots. Same class, Kentucky. Has two cage masts, 1911.



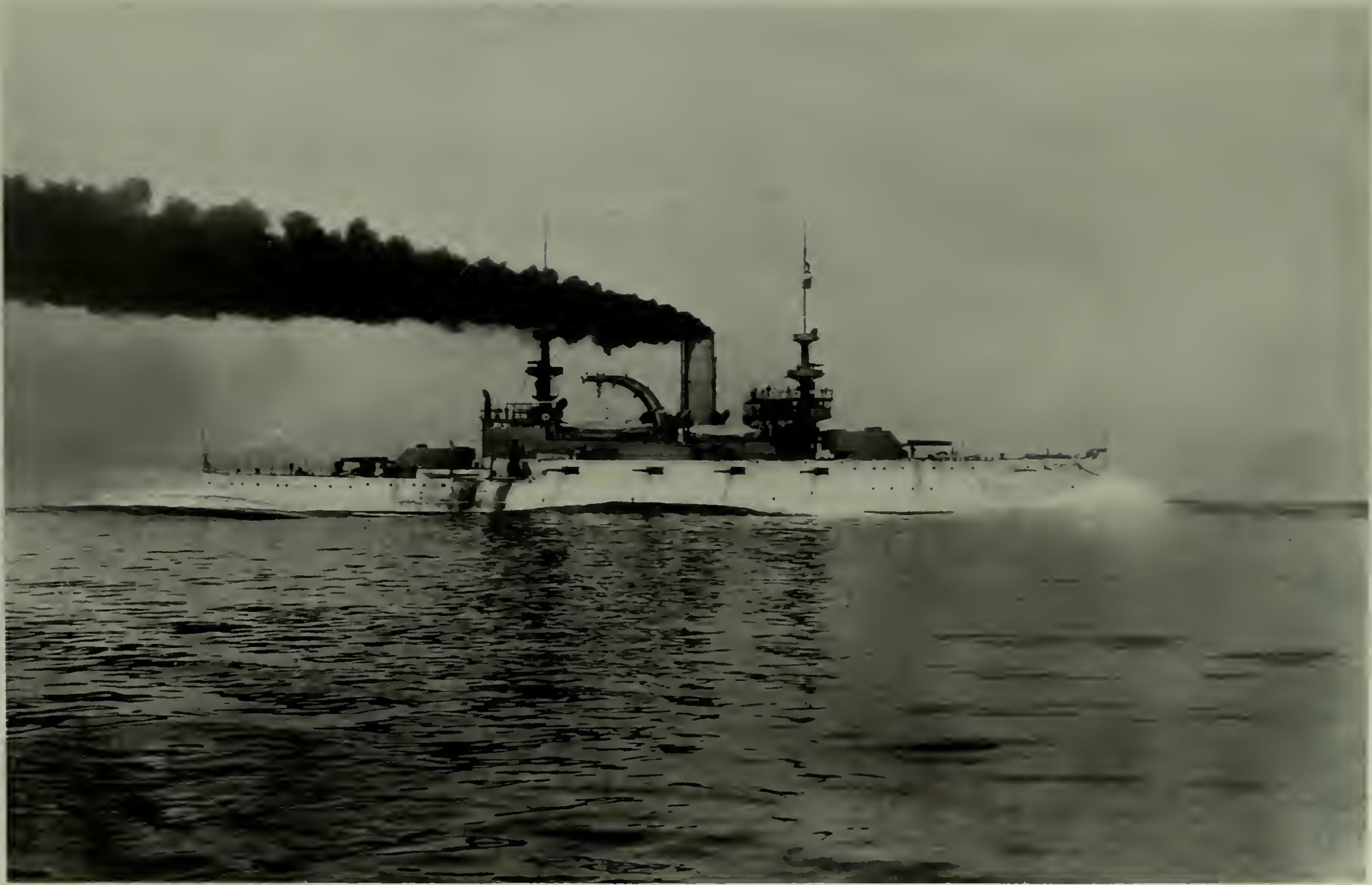
KENTUCKY (Battleship)

Displacement, 11,520 tons. Length, 368 feet. Beam, 72 feet 2½ inches. Draft, 23 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 8 Mosher. Horsepower, 12,179. Speed on trial (mean), 16.90 knots. Armament, four 13-inch, four 8-inch, eighteen 5-inch, under 4-inch four. Complement, 34 officers and 664 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1899. Photograph taken on trial, 1899, at 16.90 knots. Has two cage masts, 1911.



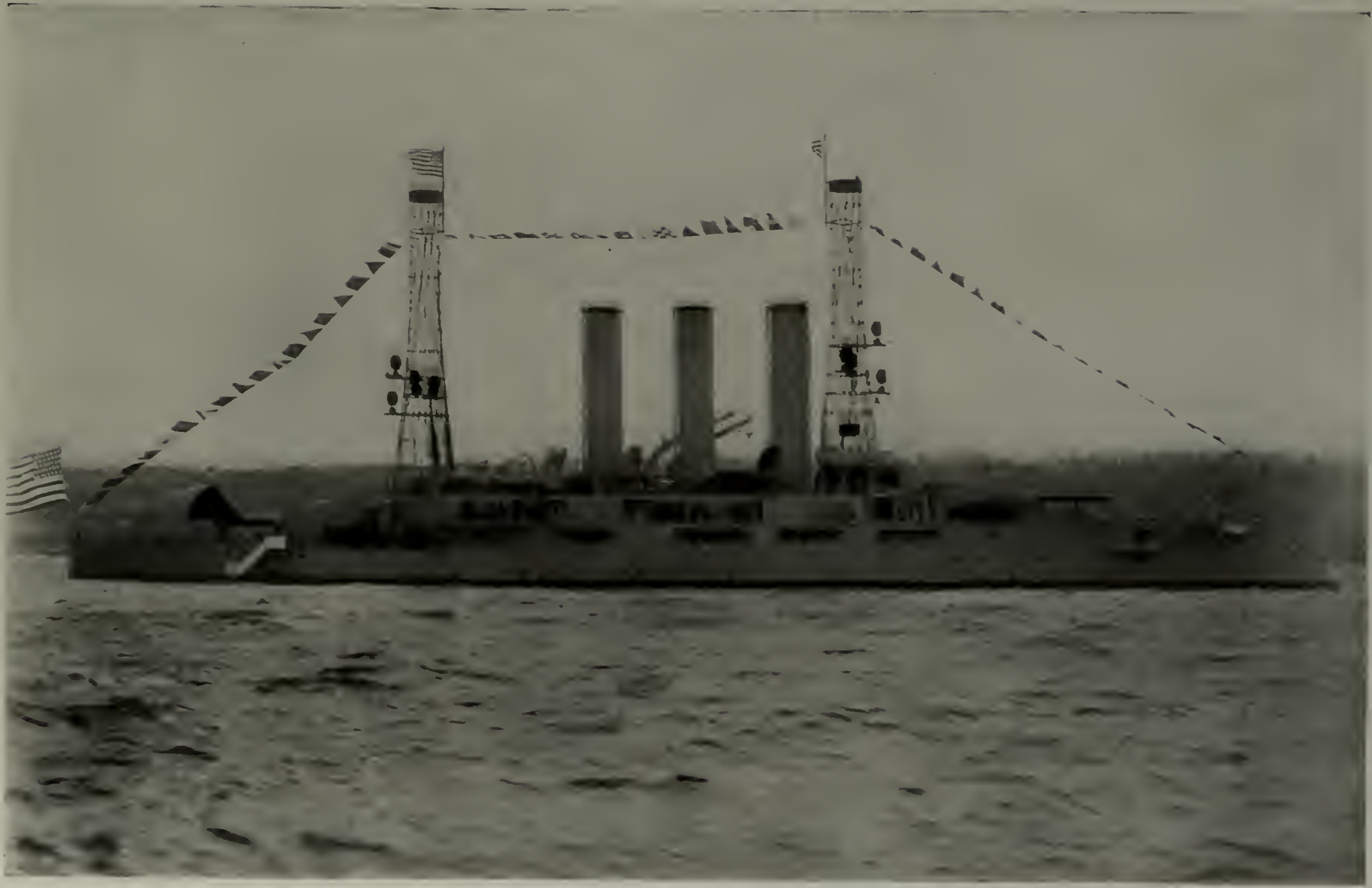
ALABAMA (Battleship)

Displacement, 11,552 tons. Length, 368 feet. Beam, 72 feet 2½ inches. Draft, 23 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 8 Scotch. Horsepower, 11,207. Speed on trial (mean), 17.01 knots. Armament, four 13-inch, fourteen 6-inch, under 4-inch eight. Complement, 34 officers and 662 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1900. Photograph taken, 1900. Same class, Illinois and Wisconsin. Has two cage masts, 1911.



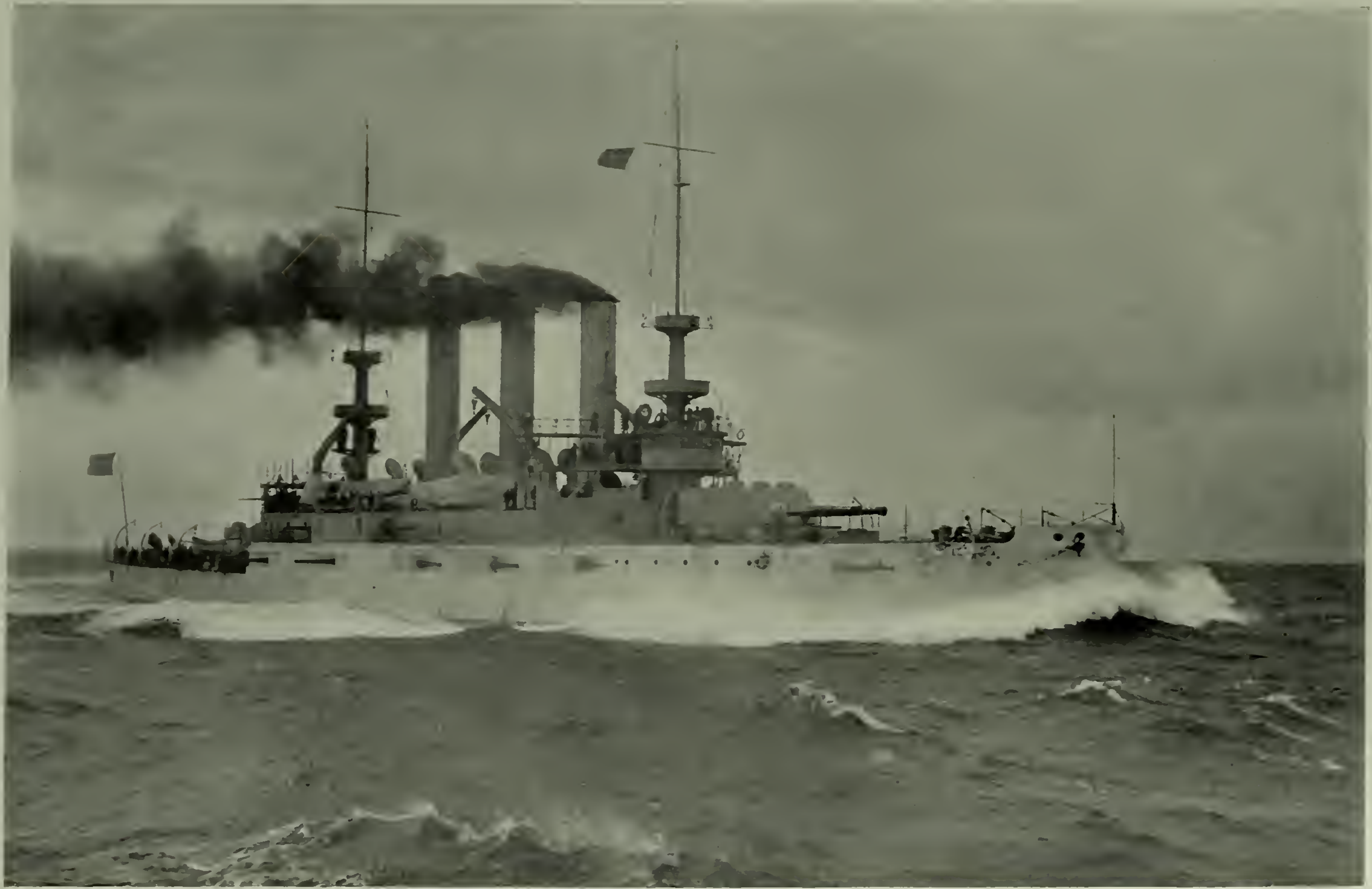
ILLINOIS (Battleship)

Displacement, 11,552 tons. Length, 368 feet. Beam, 72 feet 2½ inches. Draft, 23 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 8 Mosher. Horsepower, 12,757. Speed on trial (mean), 17.45 knots. Armament, four 13-inch, fourteen 6-inch, under 4-inch eight. Complement, 34 officers and 662 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1901. Photograph taken on trial, 1901, at 17.45 knots. Has two cage masts, 1911.



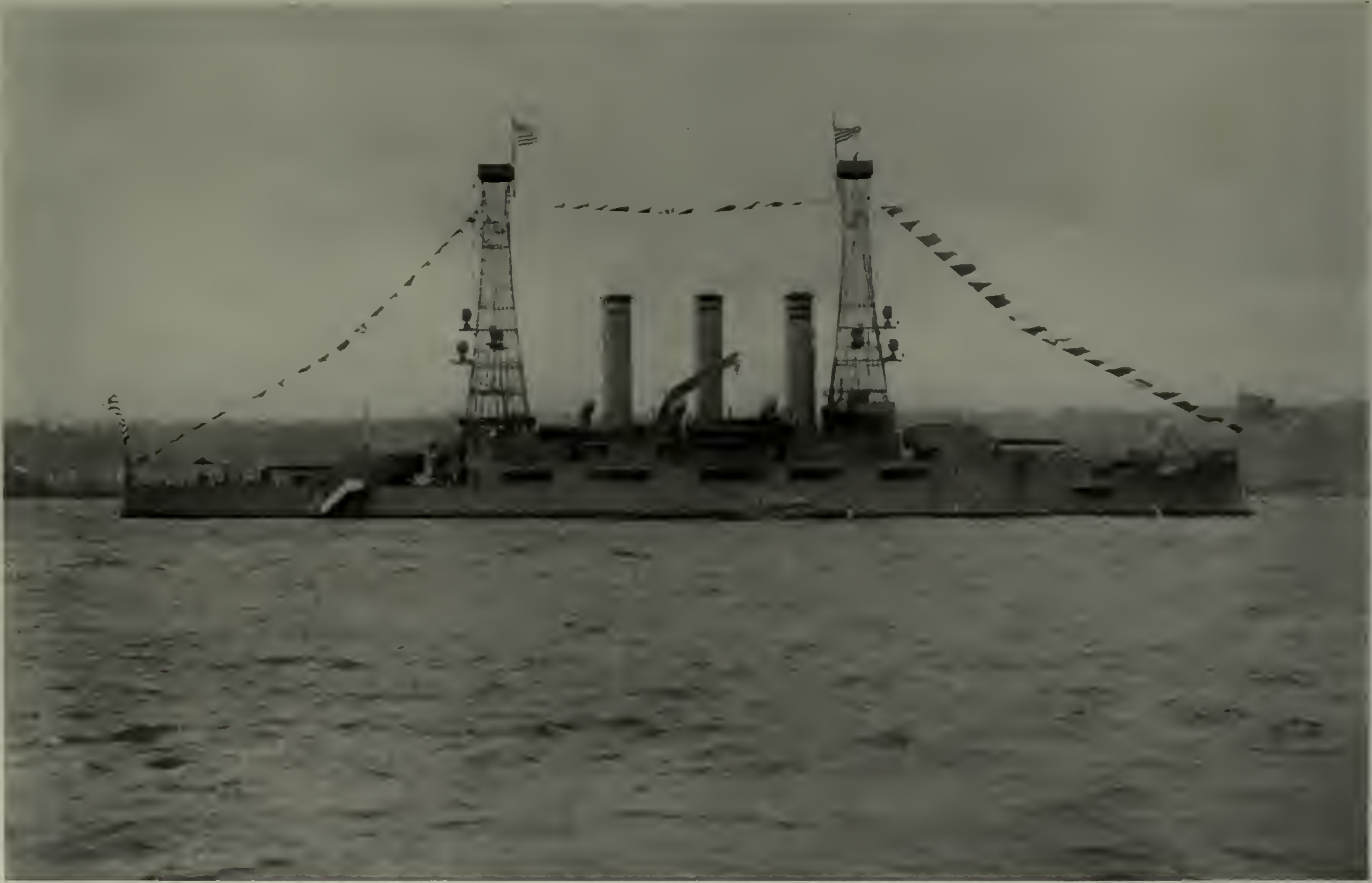
MAINE (Battleship)

Displacement, 12,500 tons. Length, 388 feet. Beam, 72 feet 2½ inches. Draft, 23 feet 10 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 15,683. Speed on trial (mean), 18 knots. Armament, four 12-inch, sixteen 6-inch, under 4-inch ten, and two 18-inch torpedo tubes. Complement, 44 officers and 755 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1902. Photograph taken, 1911. Same class, Missouri and Ohio.



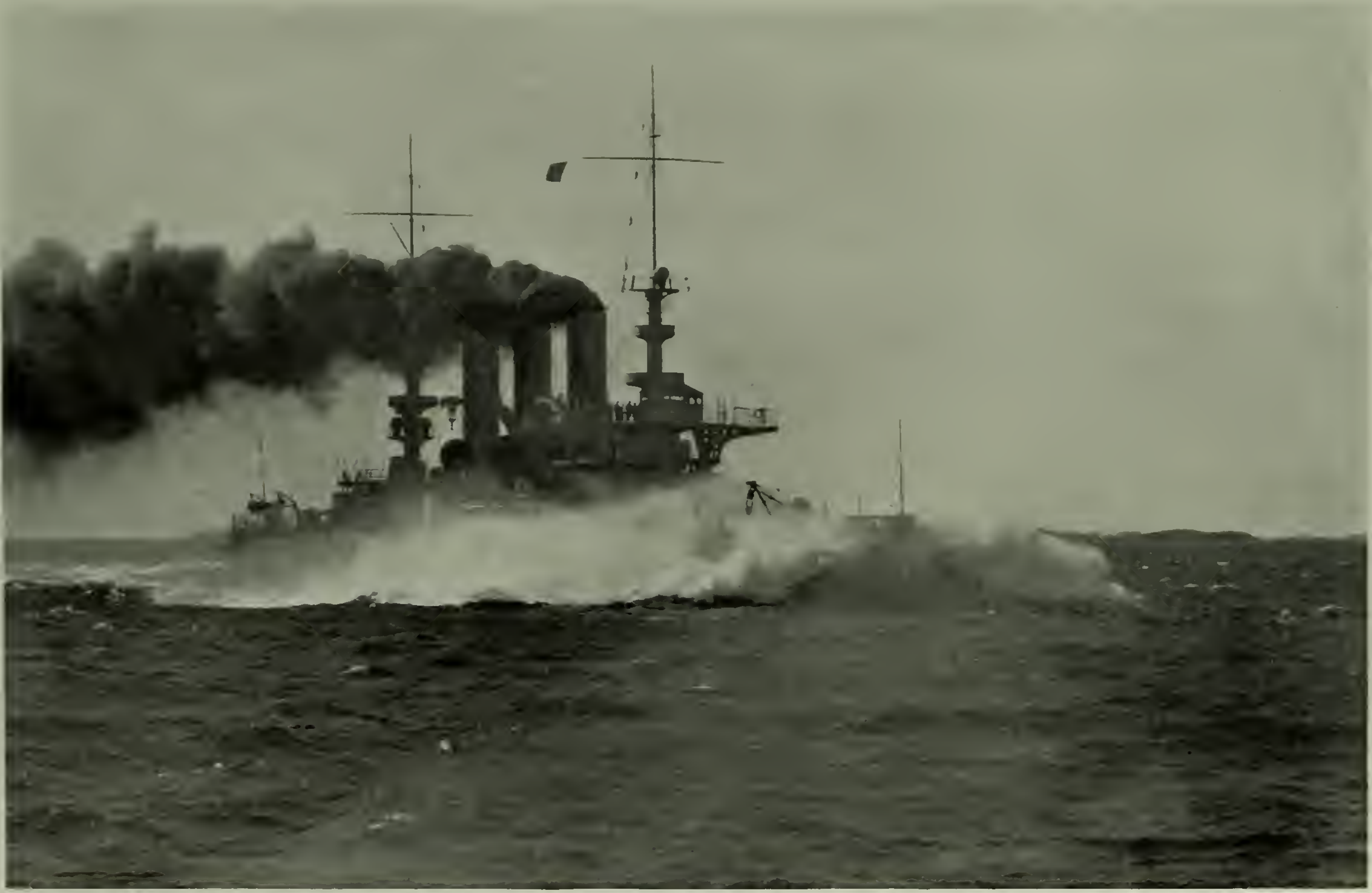
MISSOURI (Battleship)

Displacement, 12,500 tons. Length, 388 feet. Beam, 72 feet 2½ inches. Draft, 23 feet 11 inches. Engines, 2 vertical triple expansion; boilers, 12 Thornycroft. Horsepower, 15,845. Speed on trial (mean), 18.15 knots. Armament, four 12-inch, sixteen 6-inch, under 4-inch ten. Two 18-inch torpedo tubes. Complement, 44 officers and 755 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1903. Photograph taken on trial, 1903, at 18.15 knots.



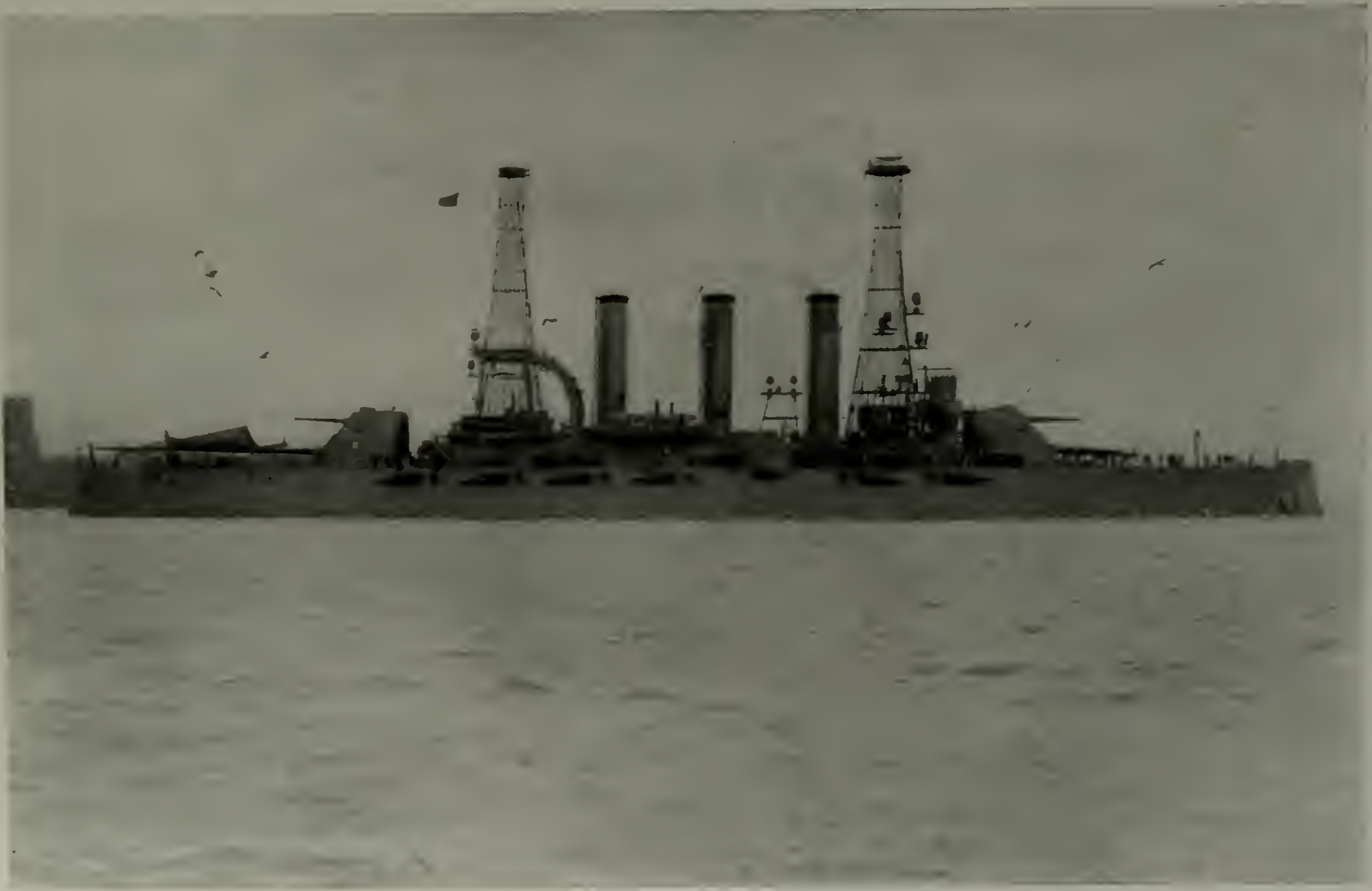
MISSOURI (Battleship)

Photograph taken, 1911. After alterations.



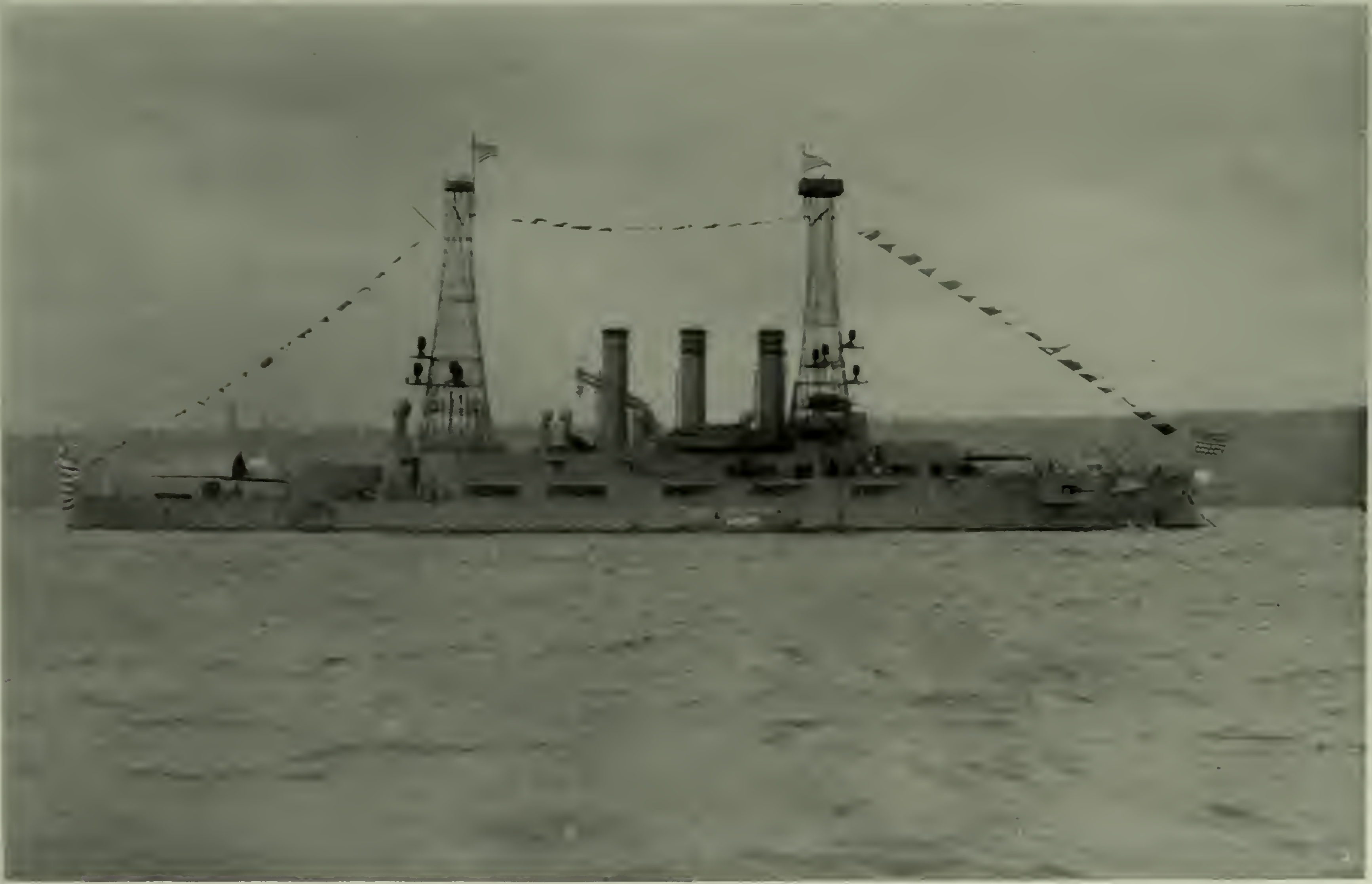
VIRGINIA (Battleship)

Displacement, 14,948 tons. Length, 435 feet. Beam, 76 feet 2½ inches. Draft, 23 feet 9 inches. Engines, 2 vertical triple expansion; boilers, 24 Niclausse. Horsepower, 22,841. Speed on trial (mean), 19.01 knots. Armament, four 12-inch, eight 8-inch, twelve 6-inch, under 4-inch sixteen, and four 21-inch torpedo tubes. Complement, 49 officers and 857 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1906. Photograph taken on trial, 1905, at 19.01 knots. Same class, New Jersey, Georgia, Rhode Island and Nebraska.



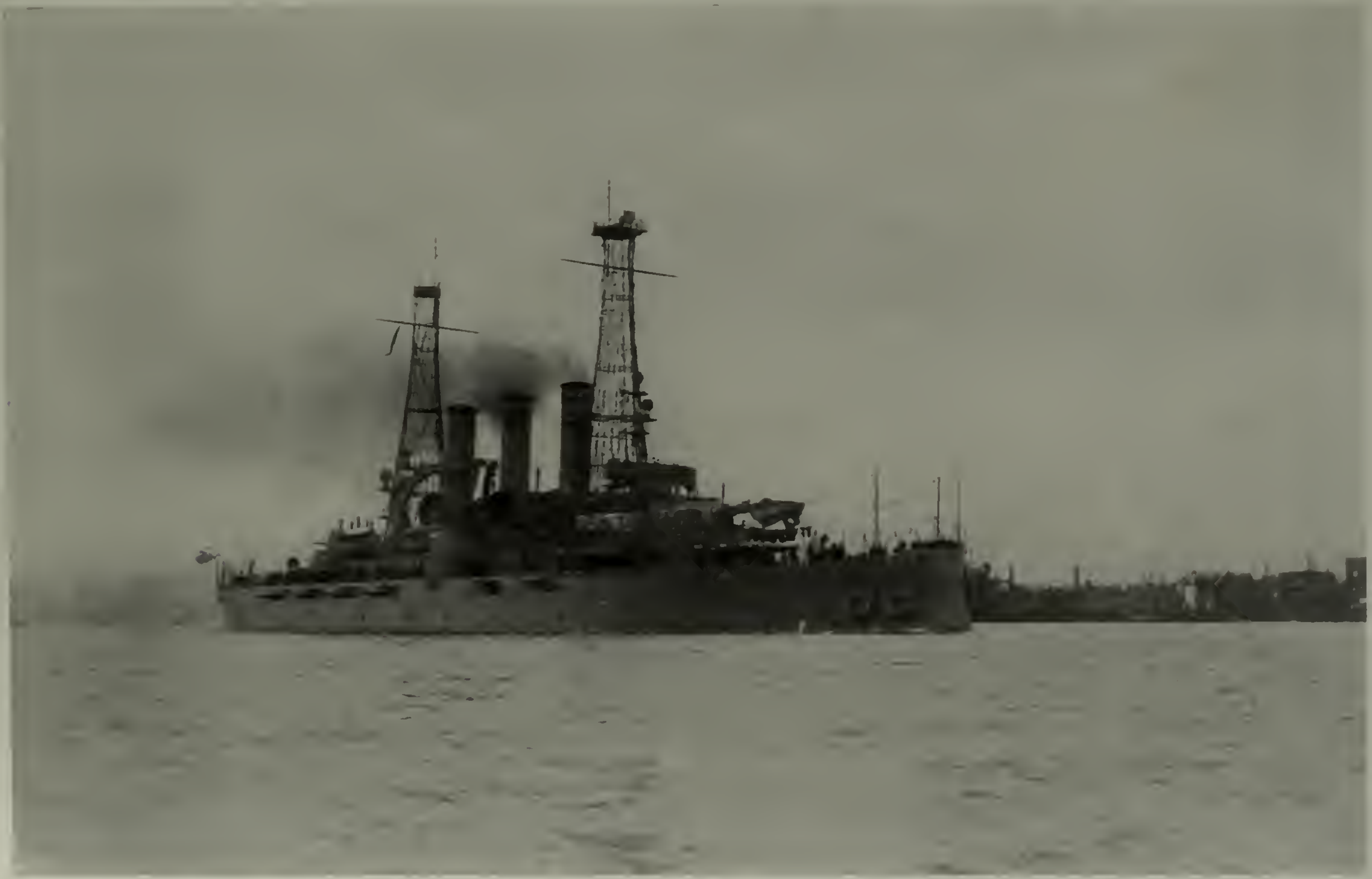
VIRGINIA (Battleship)

Photograph taken, 1910. After alterations.



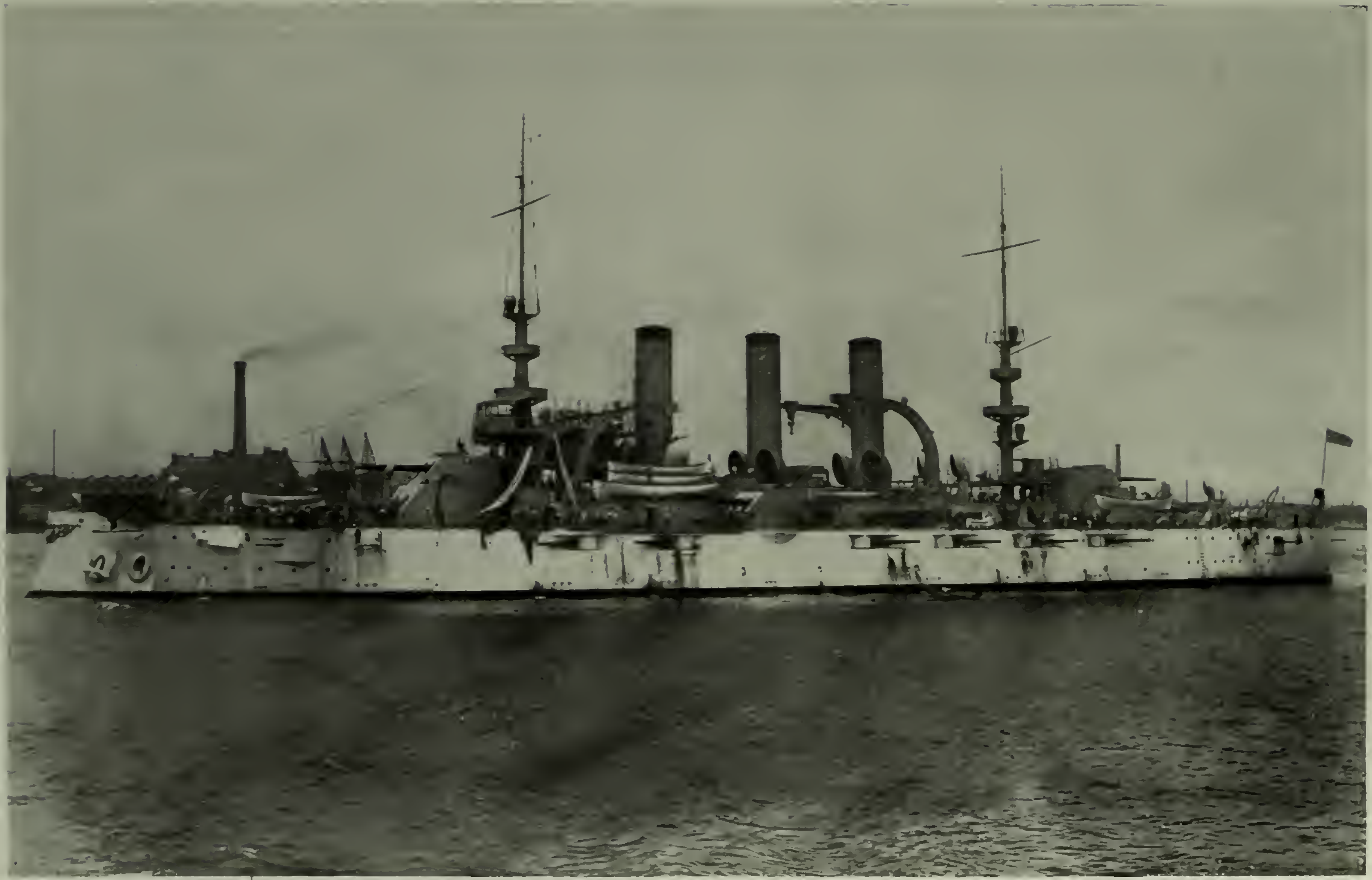
OHIO (Battleship)

Displacement, 12,500 tons. Length, 388 feet. Beam, 72 feet 2½ inches. Draft, 23 feet 7 inches. Engines, 2 vertical triple expansion; boilers, 12 Thornycroft. Horsepower, 16,220. Speed on trial (mean), 17.82 knots. Armament, four 12-inch, sixteen 6-inch, under 4-inch ten, and two 18-inch torpedo tubes. Complement, 44 officers and 755 men. Built by Union Iron Works, San Francisco, Cal., 1904. Photograph taken, 1911.



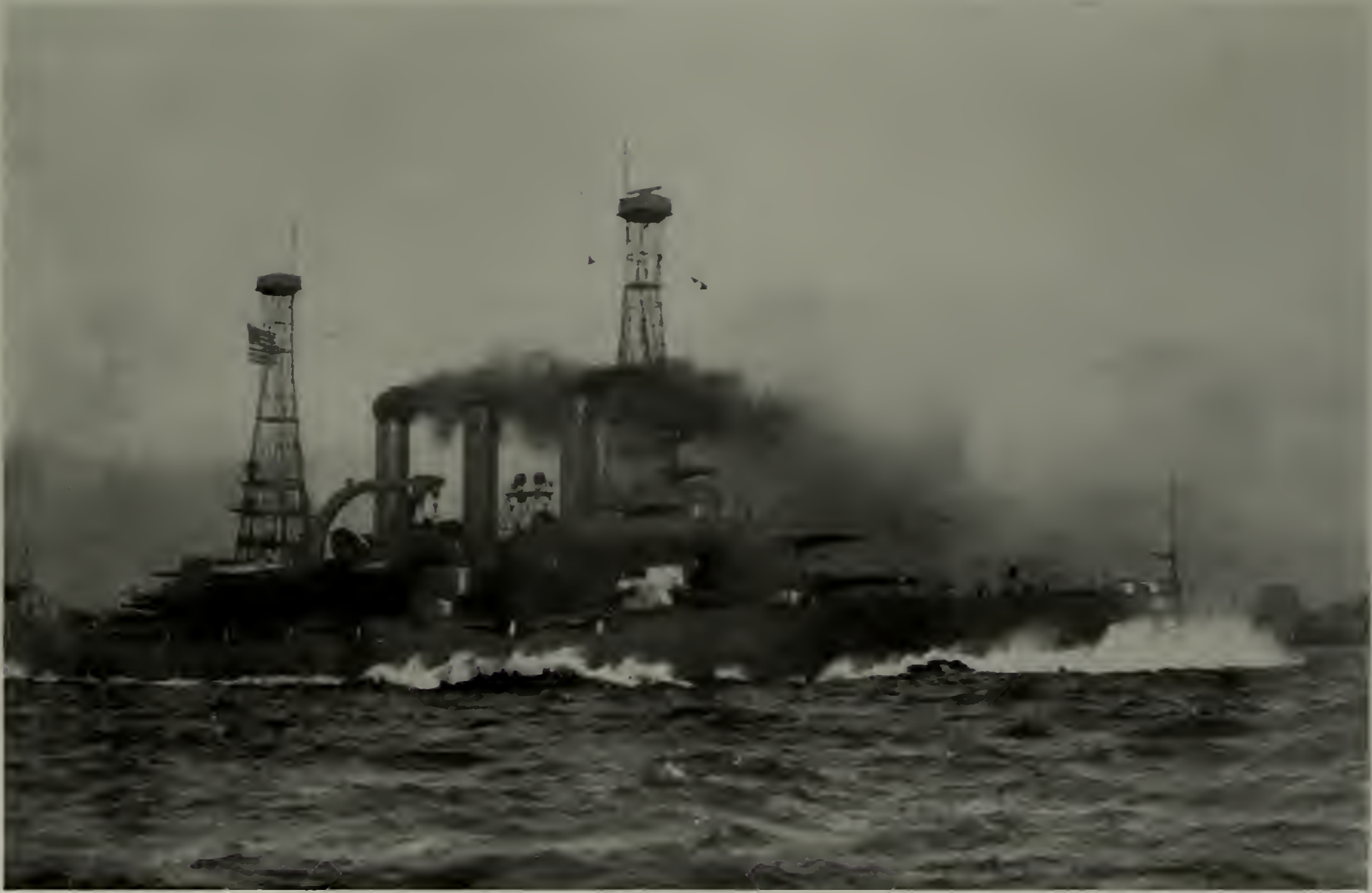
RHODE ISLAND (Battleship)

Displacement, 14,948 tons. Length, 435 feet. Beam, 76 feet 2½ inches. Draft, 23 feet 9 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 20,310. Speed on trial (mean), 19.01 knots. Armament, four 12-inch, eight 8-inch, twelve 6-inch, under 4-inch sixteen, and four 21-inch torpedo tubes. Complement, 49 officers and 857 men. Built by Fore River Shipbuilding Co., Quincy, Mass., 1906. Photograph taken, 1910.



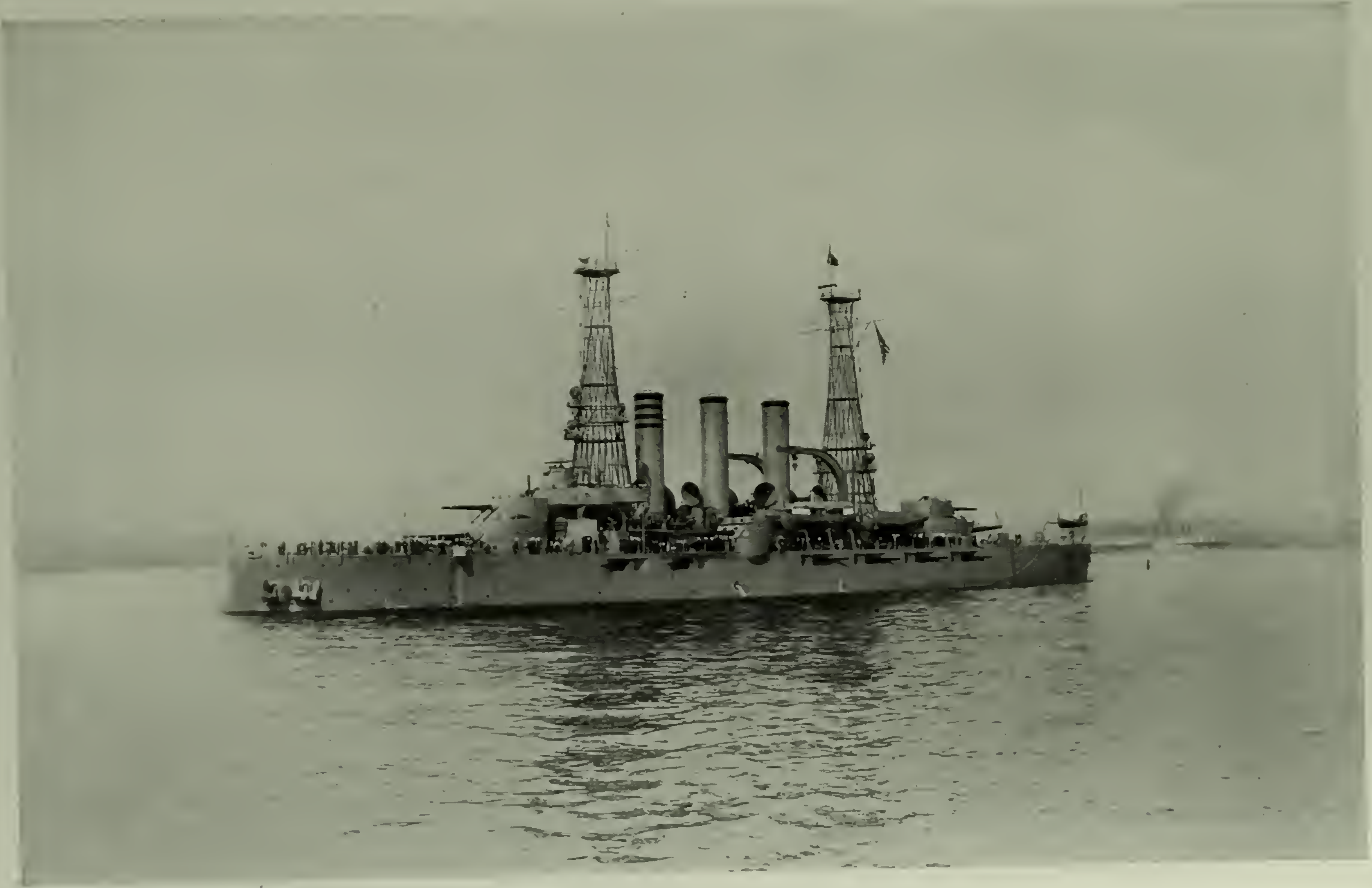
NEW JERSEY° (Battleship)

Displacement, 14,948 tons. Length, 435 feet. Beam, 76 feet 2½ inches. Draft, 23 feet 9 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 23,089. Speed on trial (mean), 19.18 knots. Armament, four 12-inch, eight 8-inch twelve 6-inch, under 4-inch sixteen, and four 21-inch torpedo tubes. Complement, 49 officers and 857 men. Built by Fore River Shipbuilding Co., Quincy, Mass., 1906. Photograph taken, 1906.



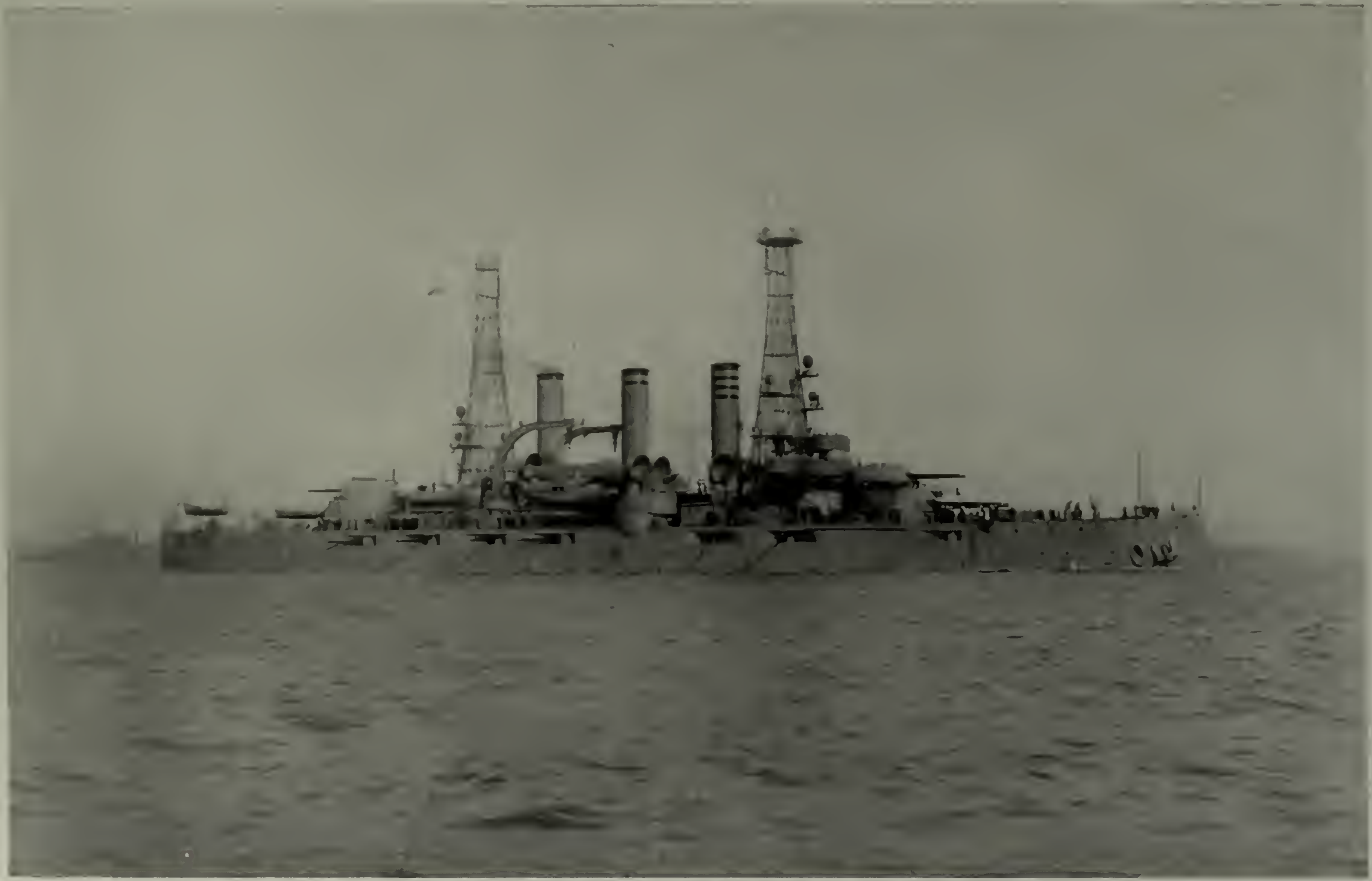
NEW JERSEY (Battleship)

Photograph taken, 1911. After alterations.



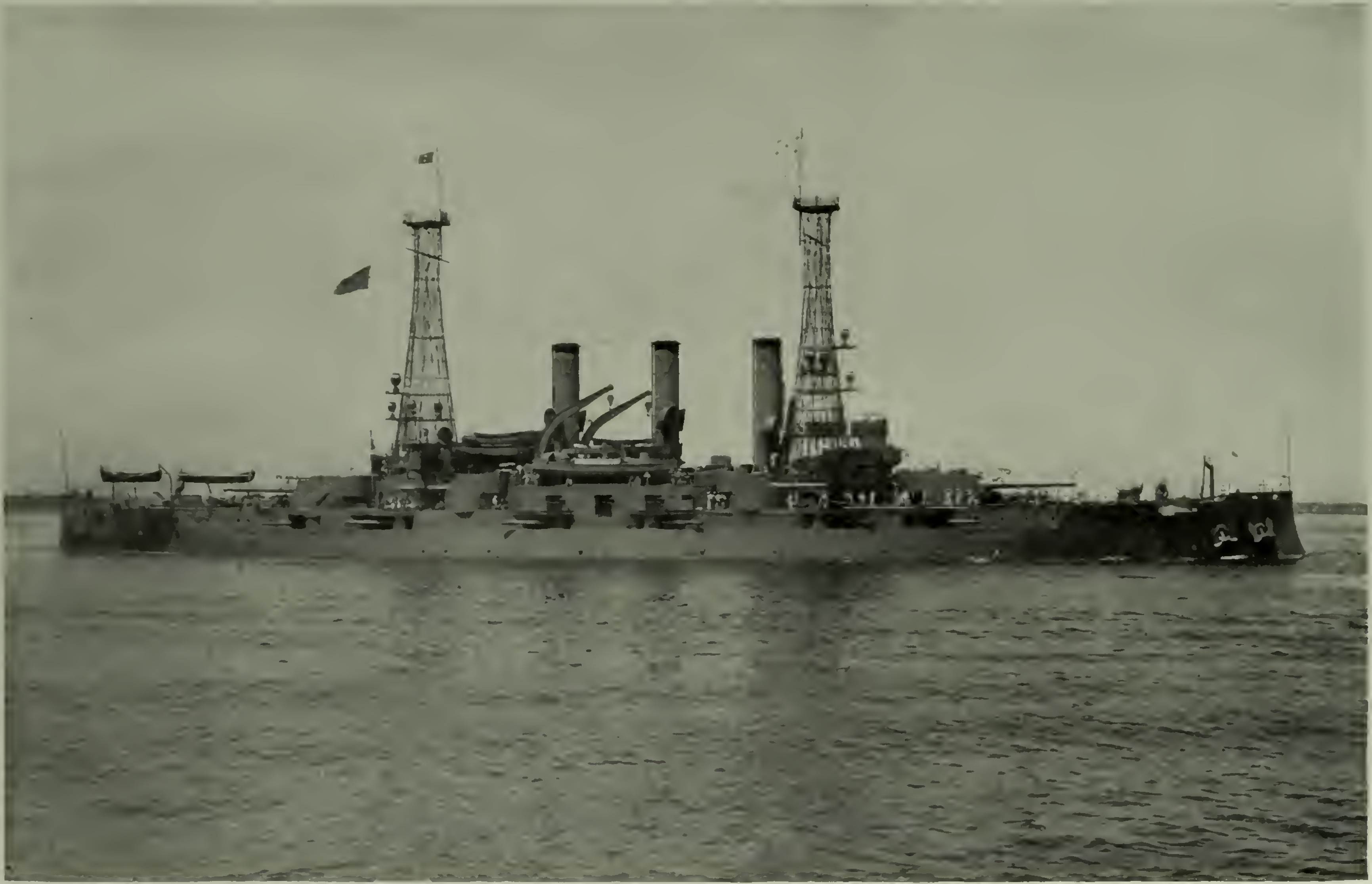
GEORGIA (Battleship)

Displacement, 14,948 tons. Length, 435 feet. Beam, 76 feet 2½ inches. Draft, 23 feet 9 inches. Engines, 2 vertical triple expansion; boilers, 24 Niclausse. Horsepower, 25,088. Speed on trial (mean), 19.26 knots. Armament, four 12-inch, eight 8-inch, twelve 6-inch, under 4-inch sixteen, and four 21-inch torpedo tubes. Complement, 52 officers and 888 men. Built by Bath Iron Works, Bath, Me., 1906. Photograph taken, 1911.



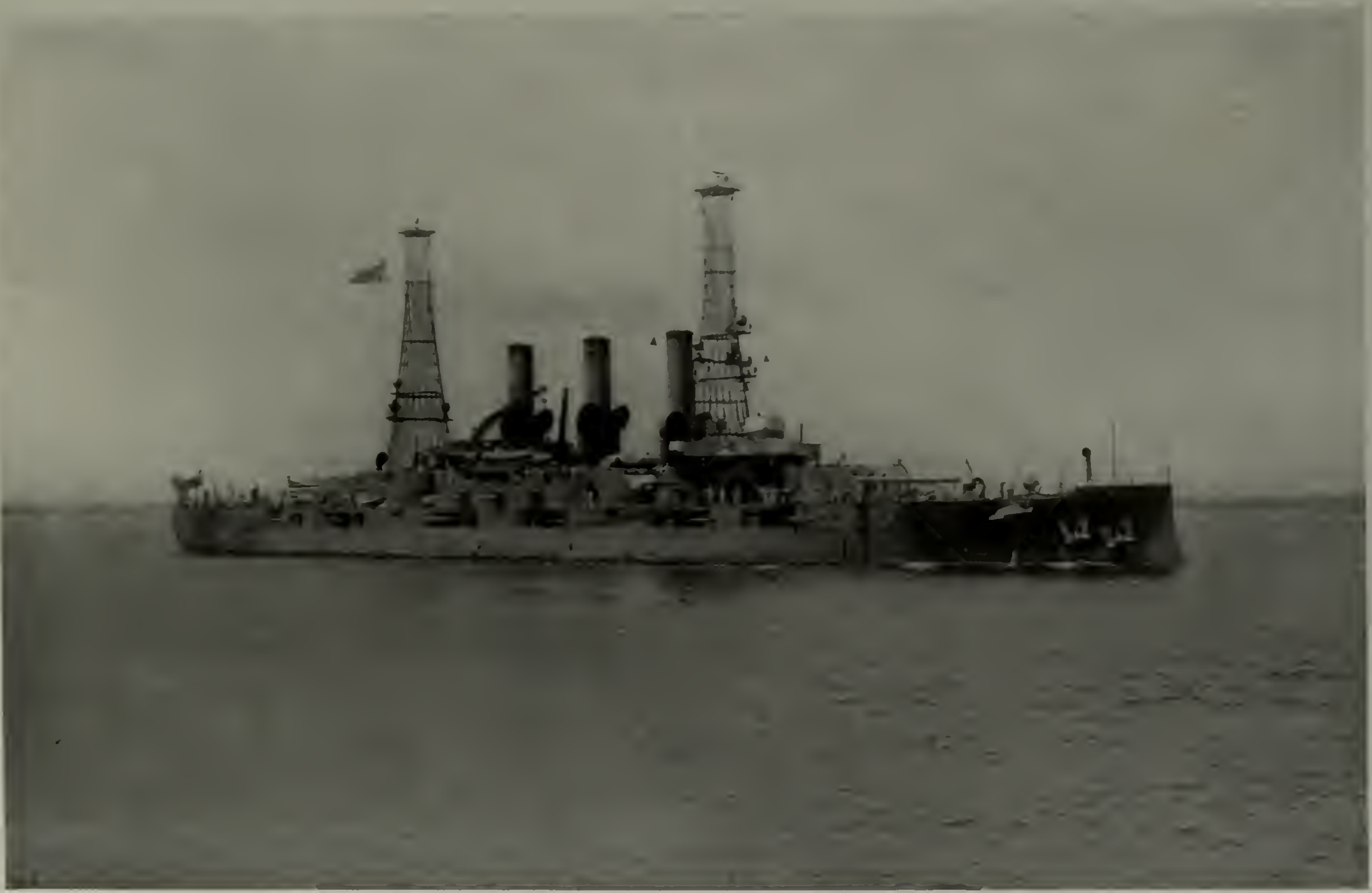
NEBRASKA (Battleship)

Displacement, 14,948 tons. Length, 435 feet. Beam, 76 feet 2½ inches. Draft, 23 feet 9 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 21,283. Speed on trial (mean), 19.06 knots. Armament, four 12-inch, eight 8-inch, twelve 6-inch, under 4-inch twenty-four, and four 21-inch torpedo tubes. Complement, 49 officers and 857 men. Built by Moran Brothers, Seattle, Wash., 1907. Photograph taken, 1911.



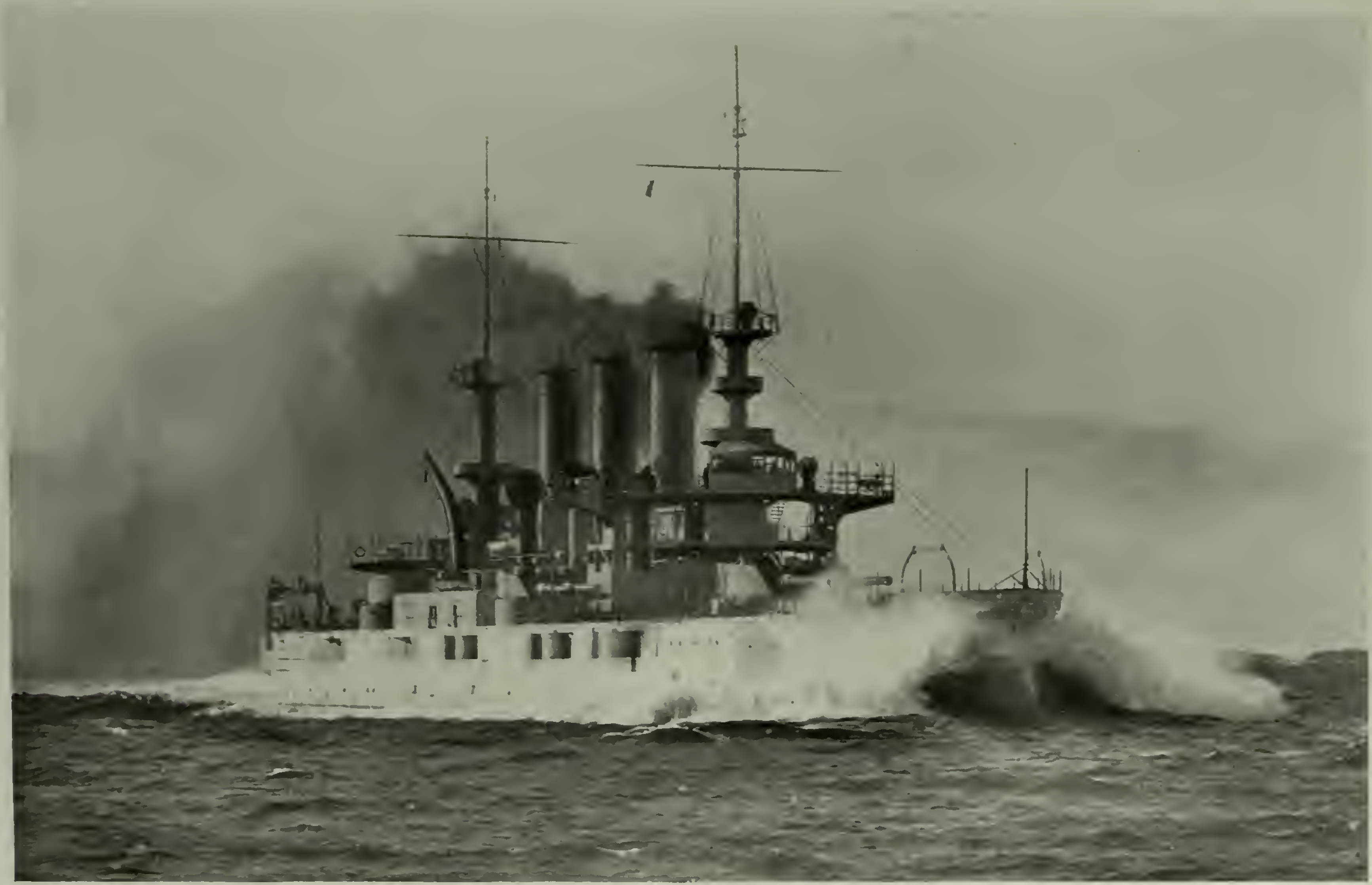
CONNECTICUT (Battleship)

Displacement, 16,000 tons. Length, 450 feet. Beam, 76 feet 10 inches. Draft, 24 feet 6 inches. Engines, 2 vertical triple expantion; boilers, 12 Babcock & Wilcox. Horsepower, 19,819. Speed on trial (mean), 18.78 knots. Armament, four 12-inch, eight 8-inch, twelve 7-inch, under 4-inch twenty-four, and four 21-inch torpedo tubes. Complement, 57 officers and 956 men. Built by Navy Yard, New York, 1906. Photograph taken, 1910.



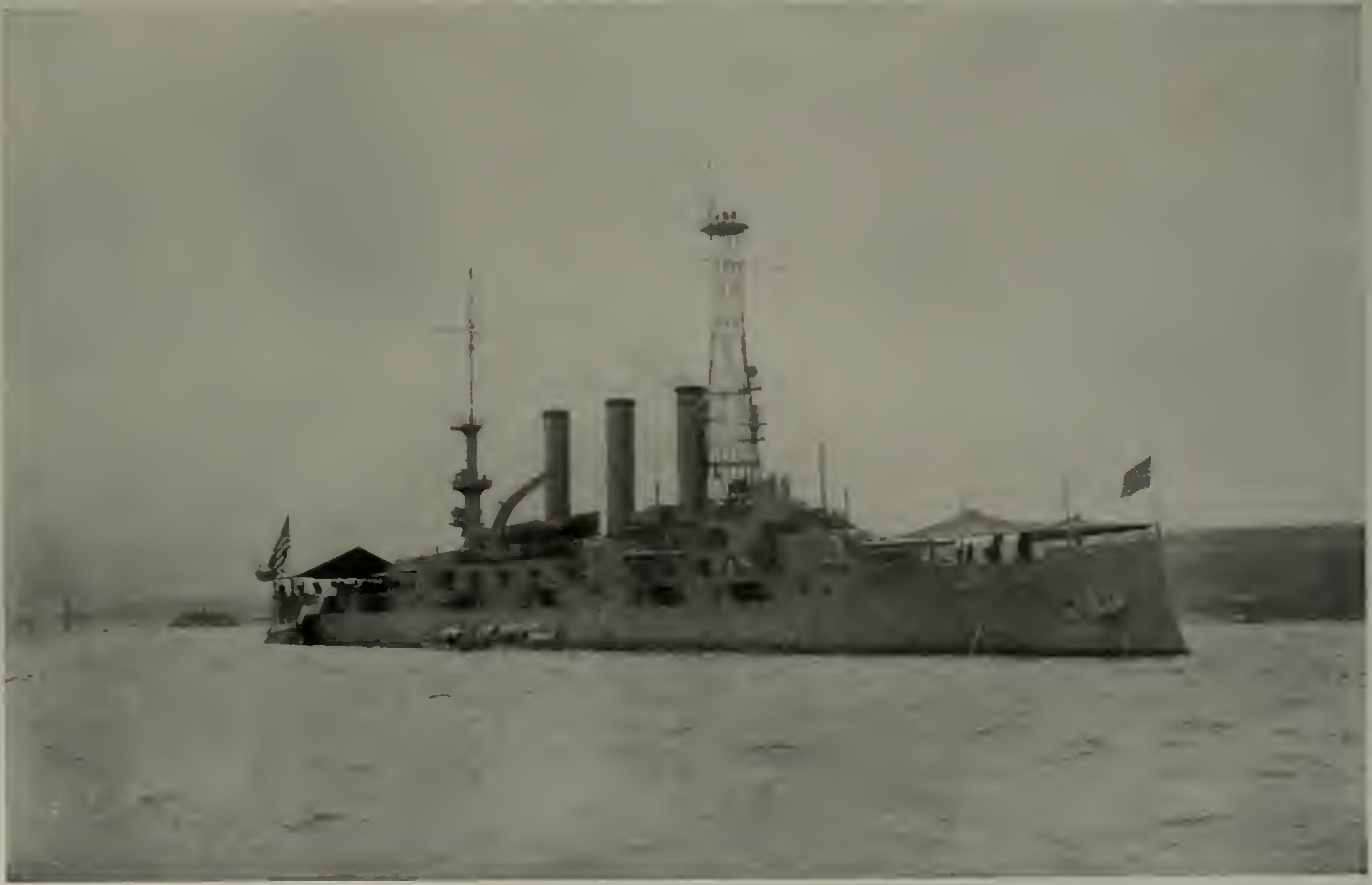
VERMONT (Battleship)

Displacement, 16,000 tons. Length, 450 feet. Beam, 76 feet 10 inches. Draft, 24 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 17,982. Speed on trial (mean), 18.33 knots. Armament, four 12-inch, eight 8-inch, twelve 7-inch, under 4-inch twenty-four, and four 21-inch torpedo tubes. Complement, 49 officers and 906 men. Built by the Fore River Shipbuilding Company, Quincy, Mass., 1907. Photograph taken in 1907.



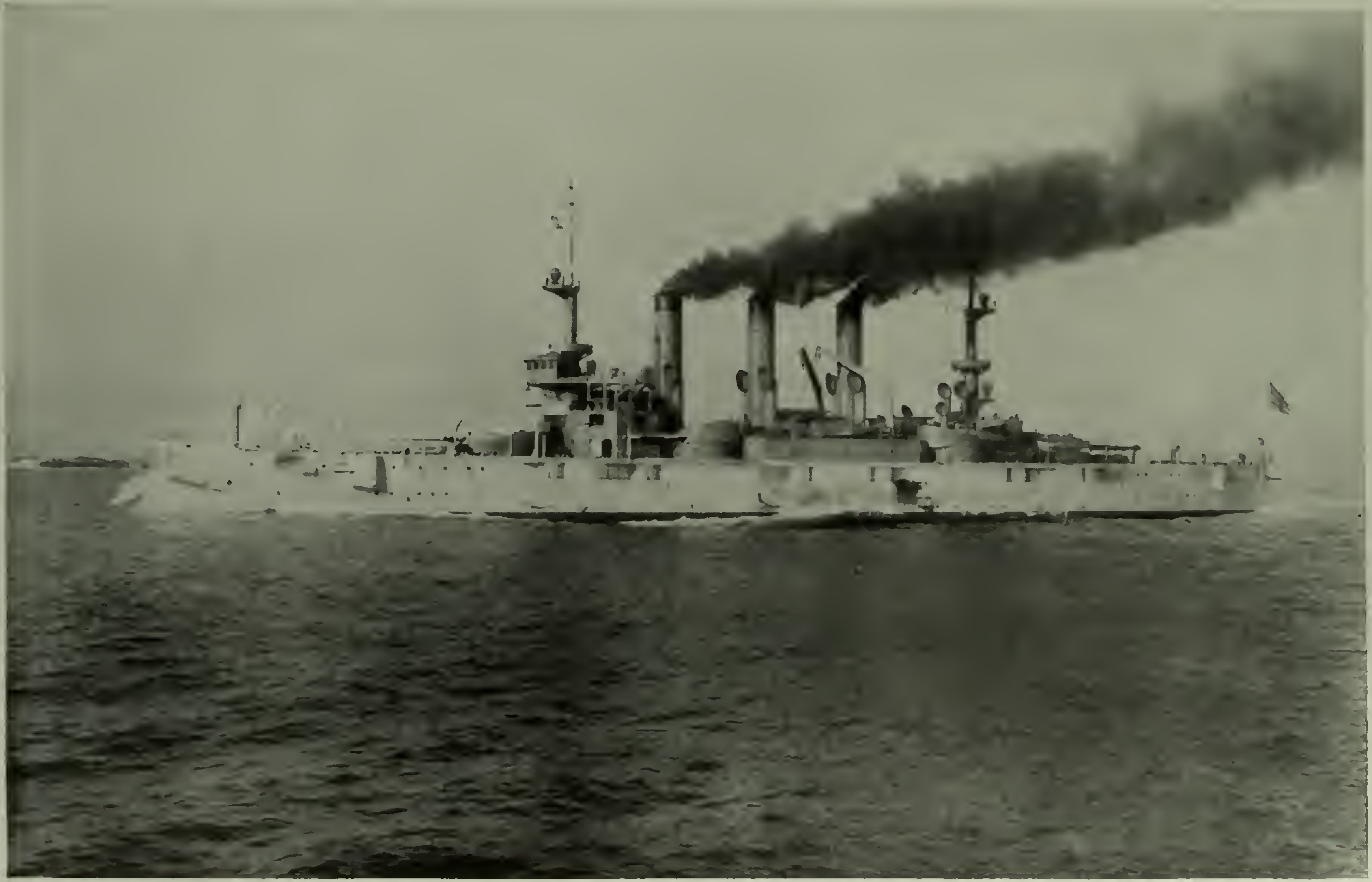
MINNESOTA (Battleship)

Displacement, 16,000 tons. Length, 450 feet. Beam, 76 feet 10 inches. Draft, 24 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 20,235. Speed on trial (mean), 18.85 knots. Armament, four 12-inch, eight 8-inch, twelve 7-inch, under 4-inch twenty-four, and four 21-inch torpedo tubes. Complement, 52 officers and 931 men. Built by the Newport News Shipbuilding & Dry Dock Company, 1907. Photograph taken on trial, 1906, at 18.188 knots.



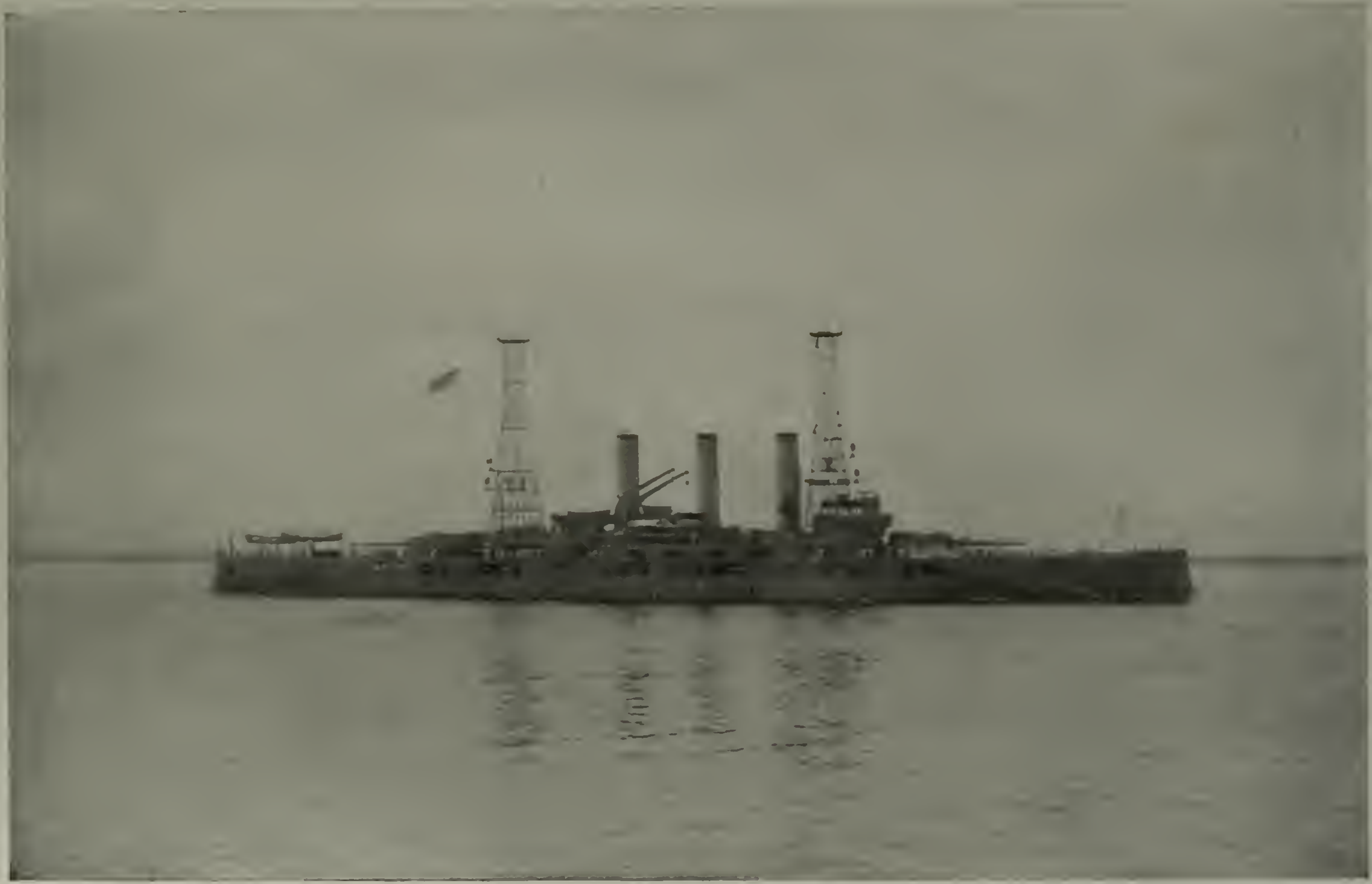
MINNESOTA (Battleship)

Photograph taken, 1909. After alterations.



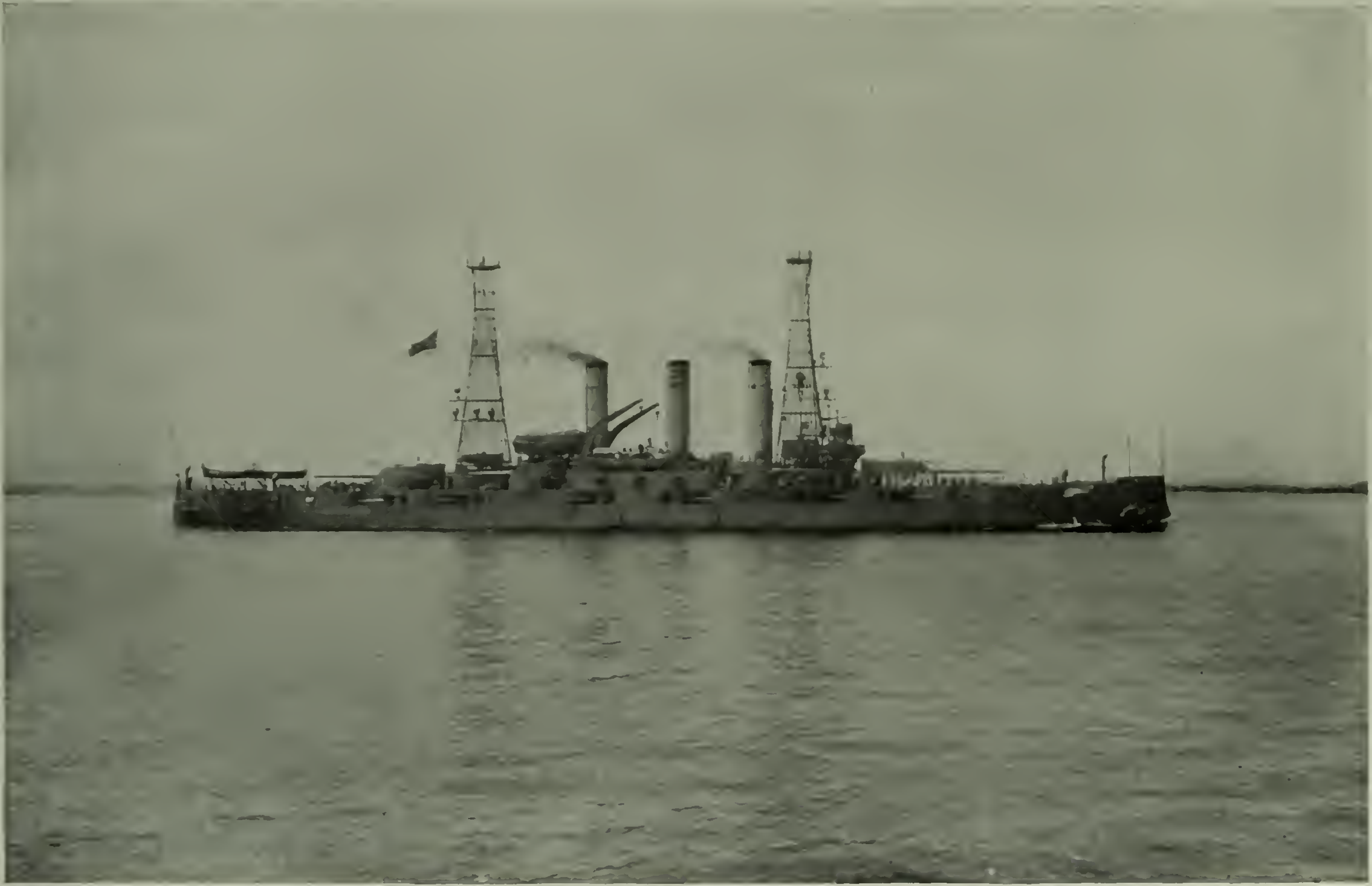
KANSAS (Battleship)

Displacement, 16,000 tons. Length, 450 feet. Beam, 76 feet 10 inches. Draft, 24 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 19,545. Speed on trial (mean), 18.09 knots. Armament, four 12-inch, eight 8-inch, twelve 7-inch, under 4-inch twenty-four, and four 21-inch torpedo tubes. Complement, 49 officers, 906 men. Built by the New York Shipbuilding Co., Camden, N. J., 1907. Photograph taken on trial, 1906, at 18.294 knots. Same class, Vermont, Minnesota, New Hampshire.



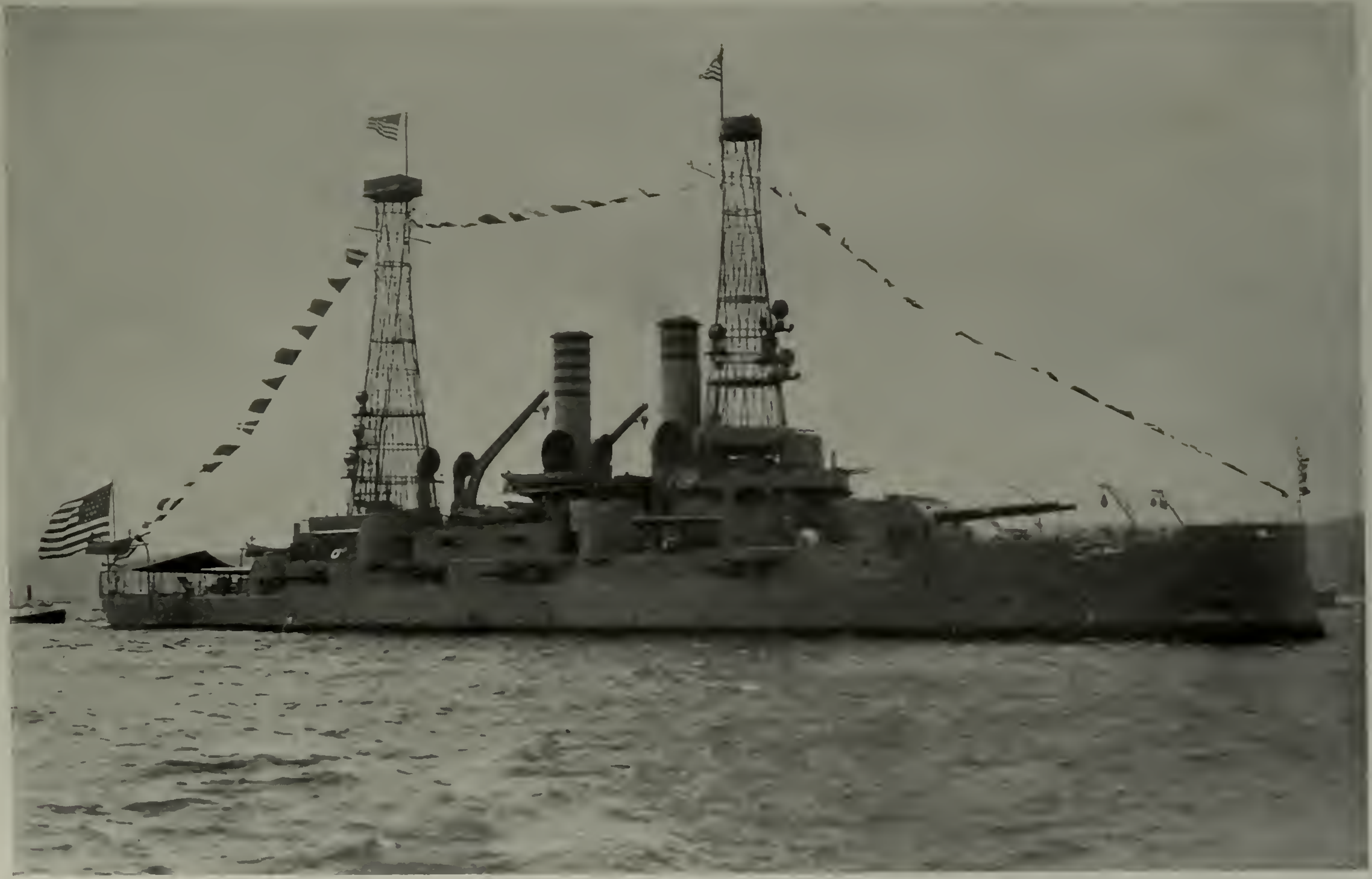
KANSAS (Battleship)

Photograph taken, 1909. After alterations.



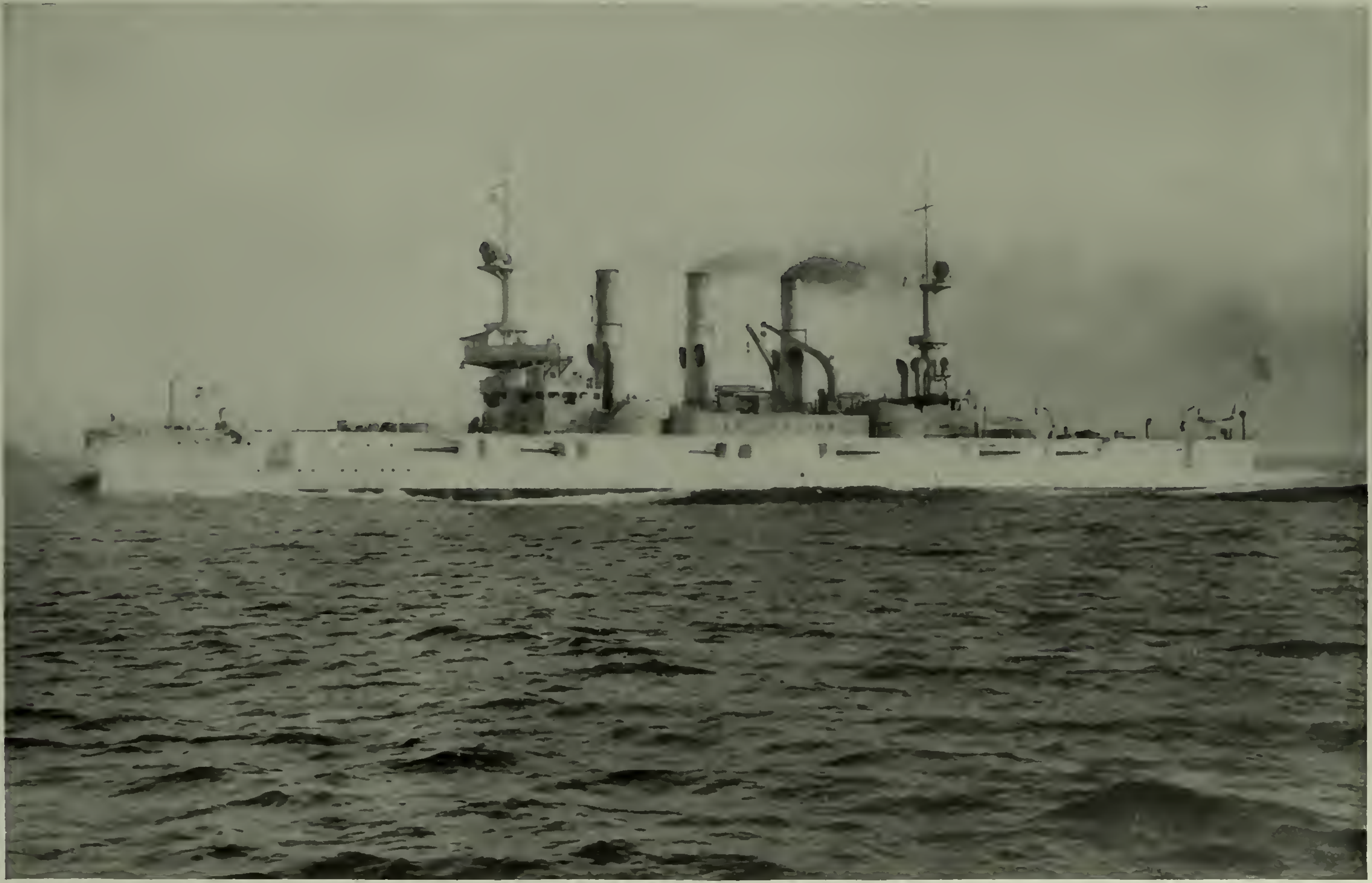
LOUISIANA (Battleship)

Displacement, 16,000 tons. Length, 450 feet. Beam, 76 feet 10 inches. Draft, 24 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 20,748. Speed on trial (mean), 18.82 knots. Armament, four 12-inch, eight 8-inch, twelve 7-inch, under 4-inch twenty-four, and four 21-inch torpedo tubes. Complement, 52 officers and 906 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1906. Photograph taken, 1911. Same class, Connecticut.



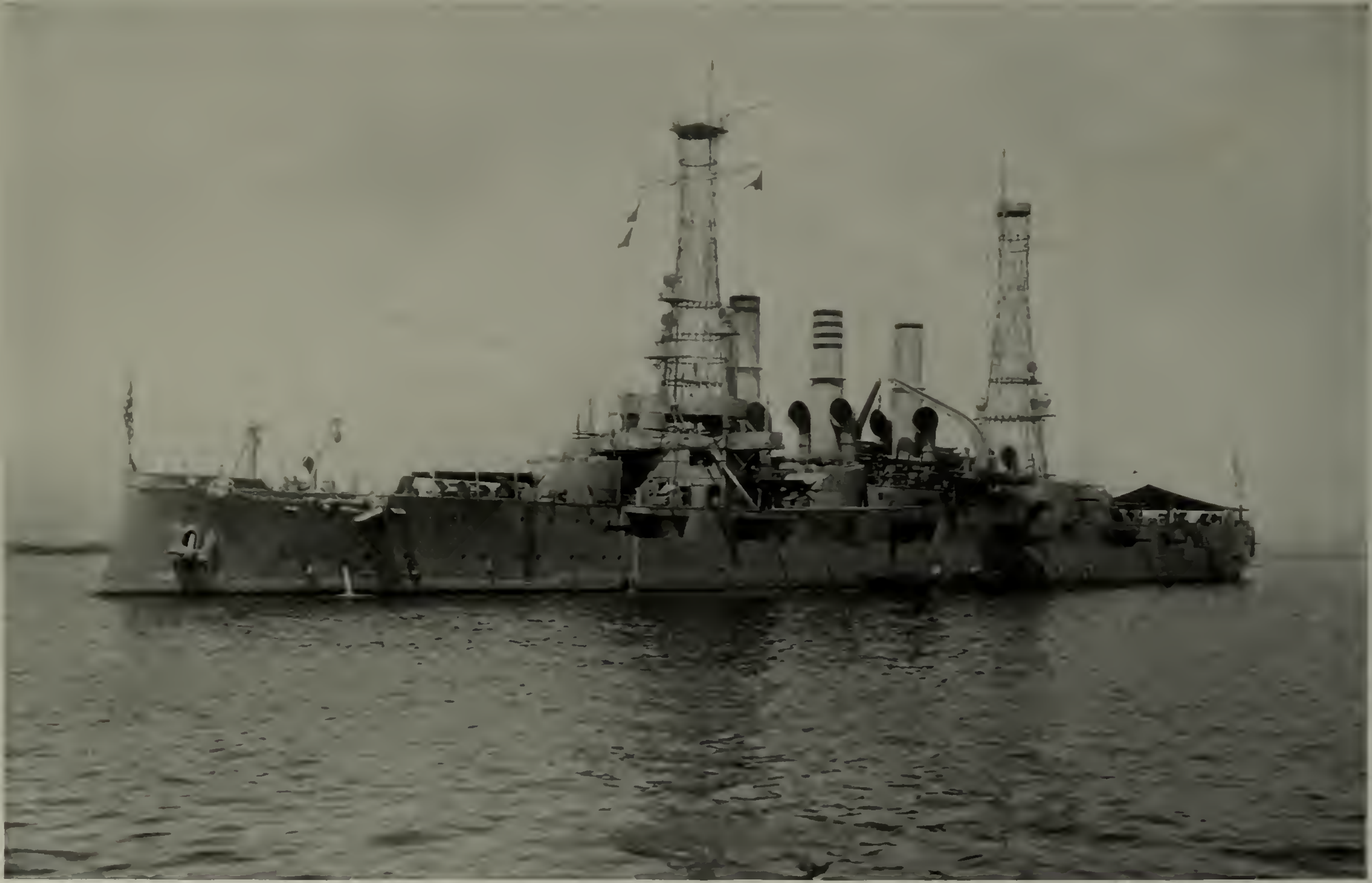
IDAHO (Battleship)

Displacement, 13,000 tons. Length, 375 feet. Beam, 77 feet. Draft, 24 feet 8 inches. Engines, 2 vertical triple expansion; boilers, 8 Babcock & Wilcox. Horsepower, 14,010. Speed on trial (mean), 17.12 knots. Armament, four 12-inch, eight 8-inch, eight 7-inch, under 4-inch sixteen, and two 21-inch torpedo tubes. Complement, 47 officers and 754 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1908. Photograph taken, 1911. Same class, Mississippi.



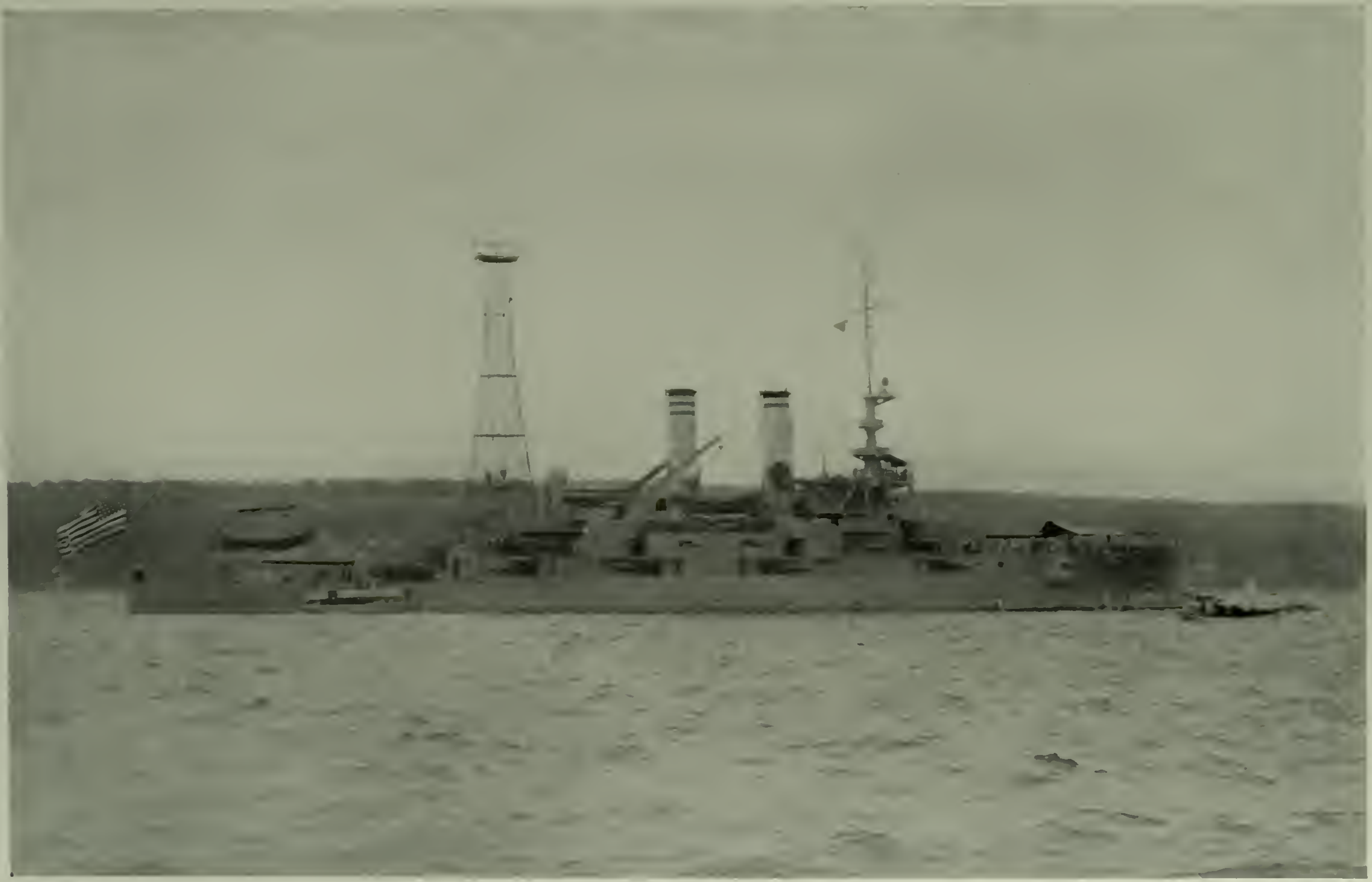
NEW HAMPSHIRE (Battleship)

Displacement, 16,000 tons. Length, 450 feet. Beam, 76 feet 10 inches. Draft, 24 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 17,100. Speed on trial (mean), 18.16 knots. Armament, four 12-inch, eight 8-inch, twelve 7-inch, under 4-inch twenty-four, and four 21-inch torpedo tubes. Complement, 49 officers and 906 men. Built by the New York Shipbuilding Co., Camden, N. J., 1908. Photograph taken on trial, 1907, at 17.615 knots. (Turrets not completed at time of trial.)



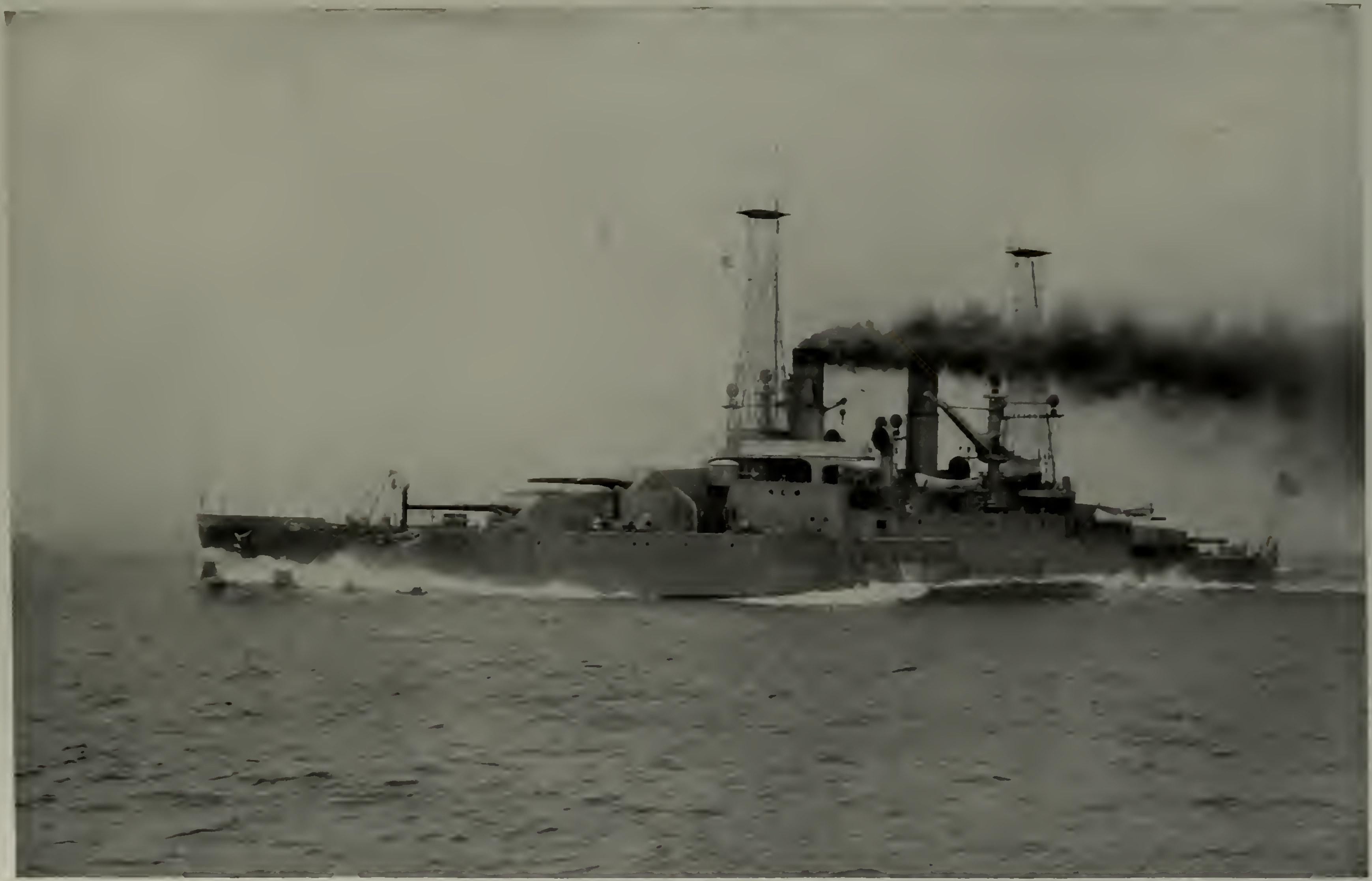
NEW HAMPSHIRE (Battleship)

Photograph taken, 1909. After alterations.



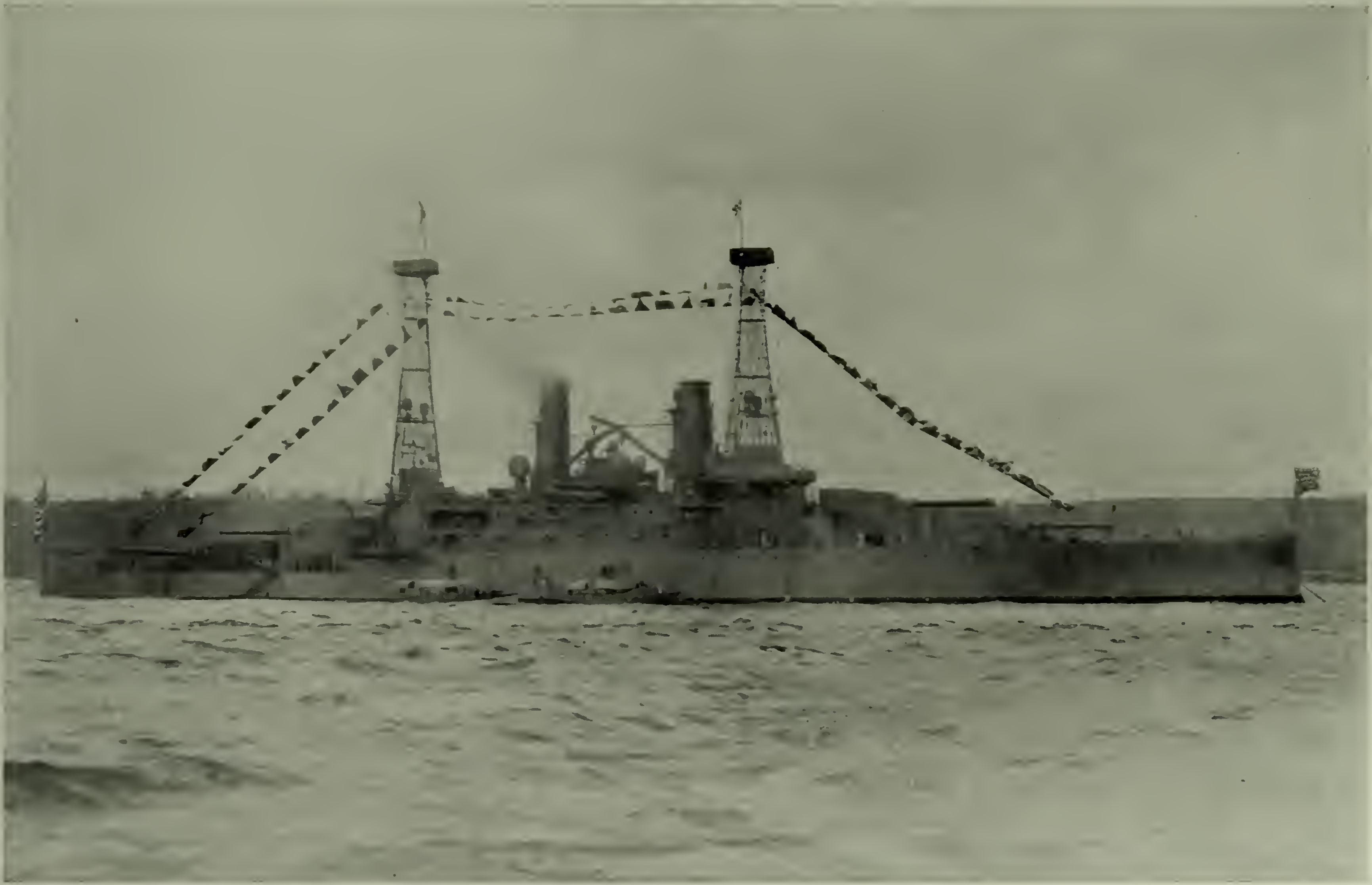
MISSISSIPPI (Battleship)

Displacement, 13,000 tons. Length, 375 feet. Beam, 77 feet. Draft, 24 feet 8 inches. Engines, 2 vertical triple expansion; boilers, 8 Babcock & Wilcox. Horsepower, 13,607. Speed on trial (mean), 17.11 knots. Armament, four 12-inch, eight 8-inch, eight 7-inch, under 4-inch sixteen, and two 21-inch torpedo tubes. Complement, 47 officers and 754 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1908. Photograph taken, 1910.



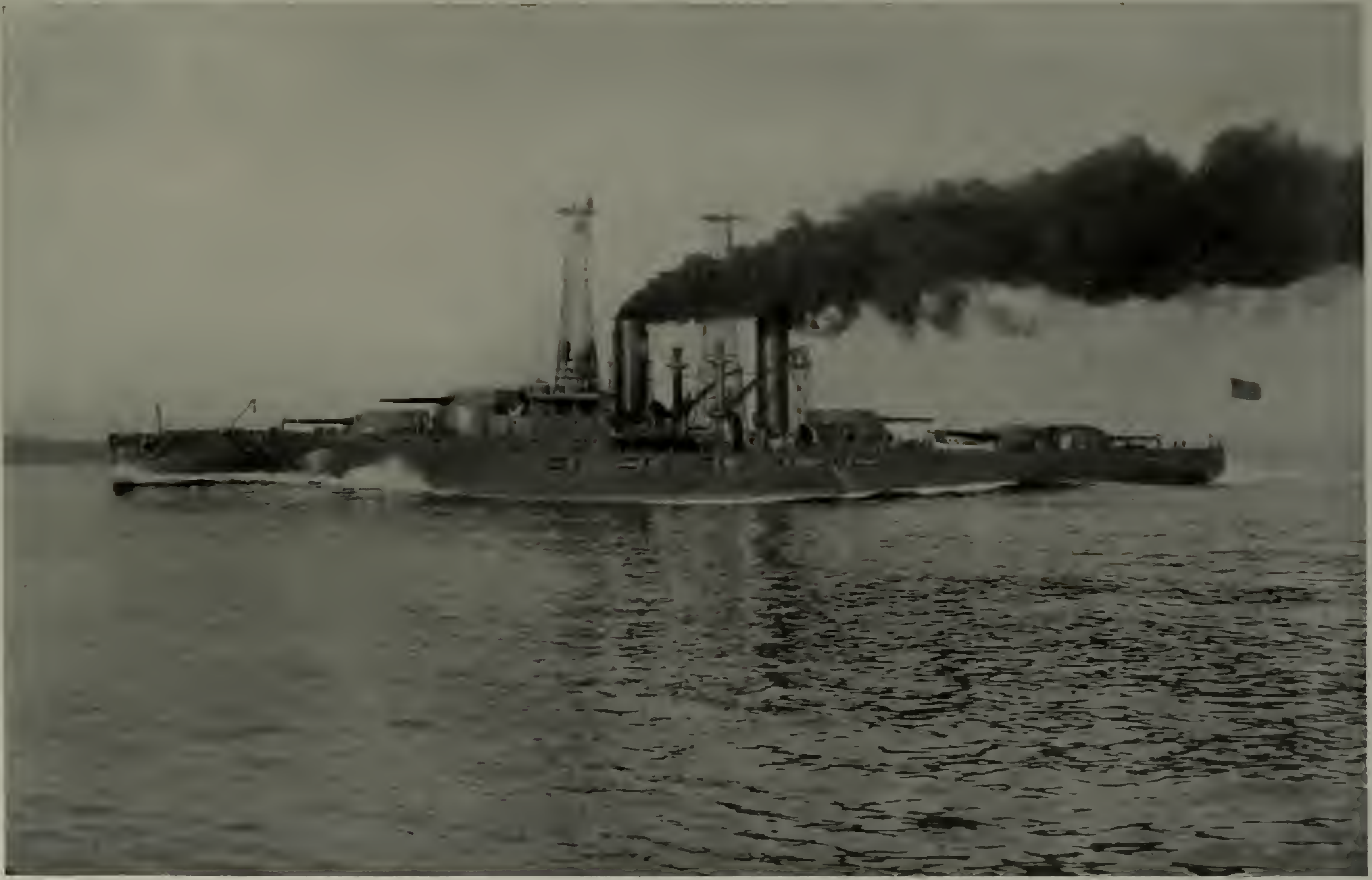
MICHIGAN (Battleship)

Displacement, 16,000 tons. Length, 450 feet. Beam, 80 feet 2½ inches. Draft, 24 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 16,313. Speed on trial (mean), 18.79 knots. Armament, eight 12-inch, under 4-inch twenty-six, and two 21-inch torpedo tubes. Complement, 49 officers and 756 men. Built by New York Shipbuilding Co., Camden, N. J., 1909. Photograph taken on trial, 1909, at 17.40 knots. Same class, South Carolina.



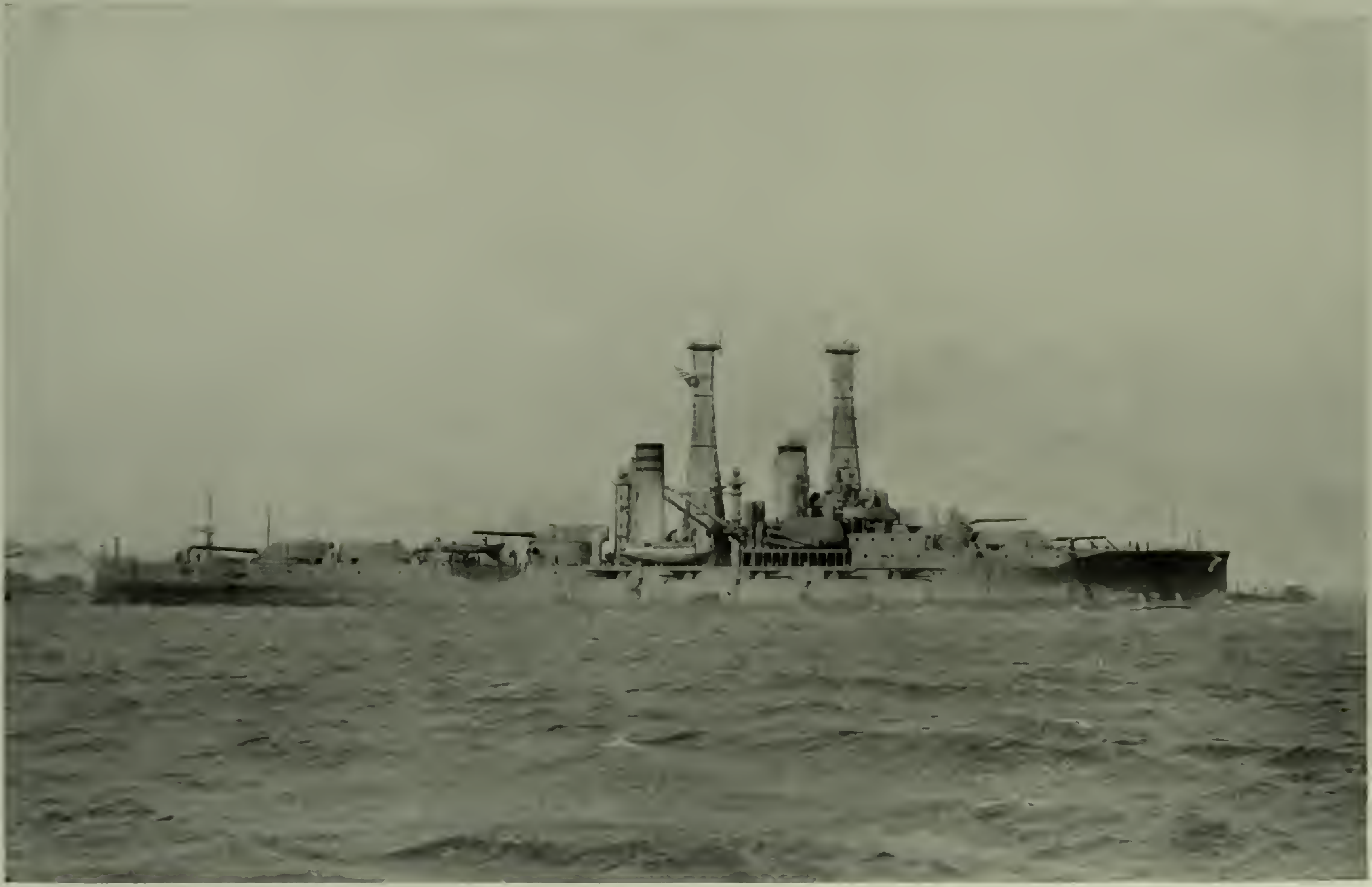
SOUTH CAROLINA (Battleship)

Displacement, 16,000 tons. Length, 450 feet. Beam, 80 feet 2½ inches. Draft, 24 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 18,000. Speed on trial (mean), 18.86 knots. Armament, eight 12-inch, under 4-inch twenty-six, and two 21-inch torpedo tubes. Complement, 49 officers and 756 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1909. Photograph taken, 1911.



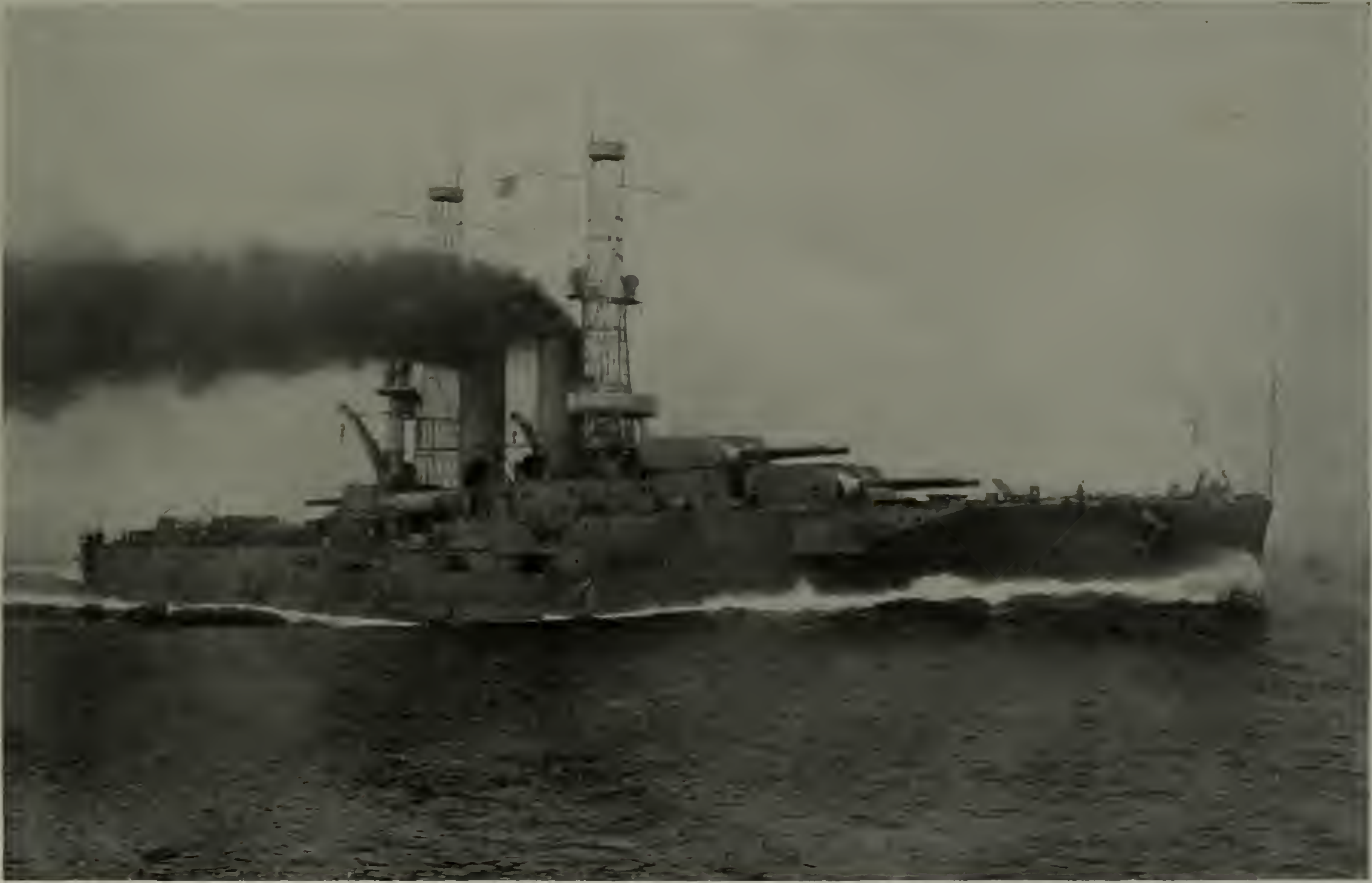
NORTH DAKOTA (Battleship)

Displacement, 20,000 tons. Length, 510 feet. Beam, 85 feet 2½ inches. Draft, 26 feet 11 inches. Engines, 2 Curtis turbines; boilers, 14 Babcock & Wilcox. Horsepower, 31,300. Speed on trial (mean), 21.01 knots. Armament, ten 12-inch, fourteen 5-inch, under 4-inch four, and two 21-inch torpedo tubes. Complement, 52 officers and 893 men. Built by Fore River Shipbuilding Co., Quincy, Mass., 1910. Photograph taken on trial, 1909, at 21.82 knots. The sponsons have been removed, as shown in photograph of Delaware.



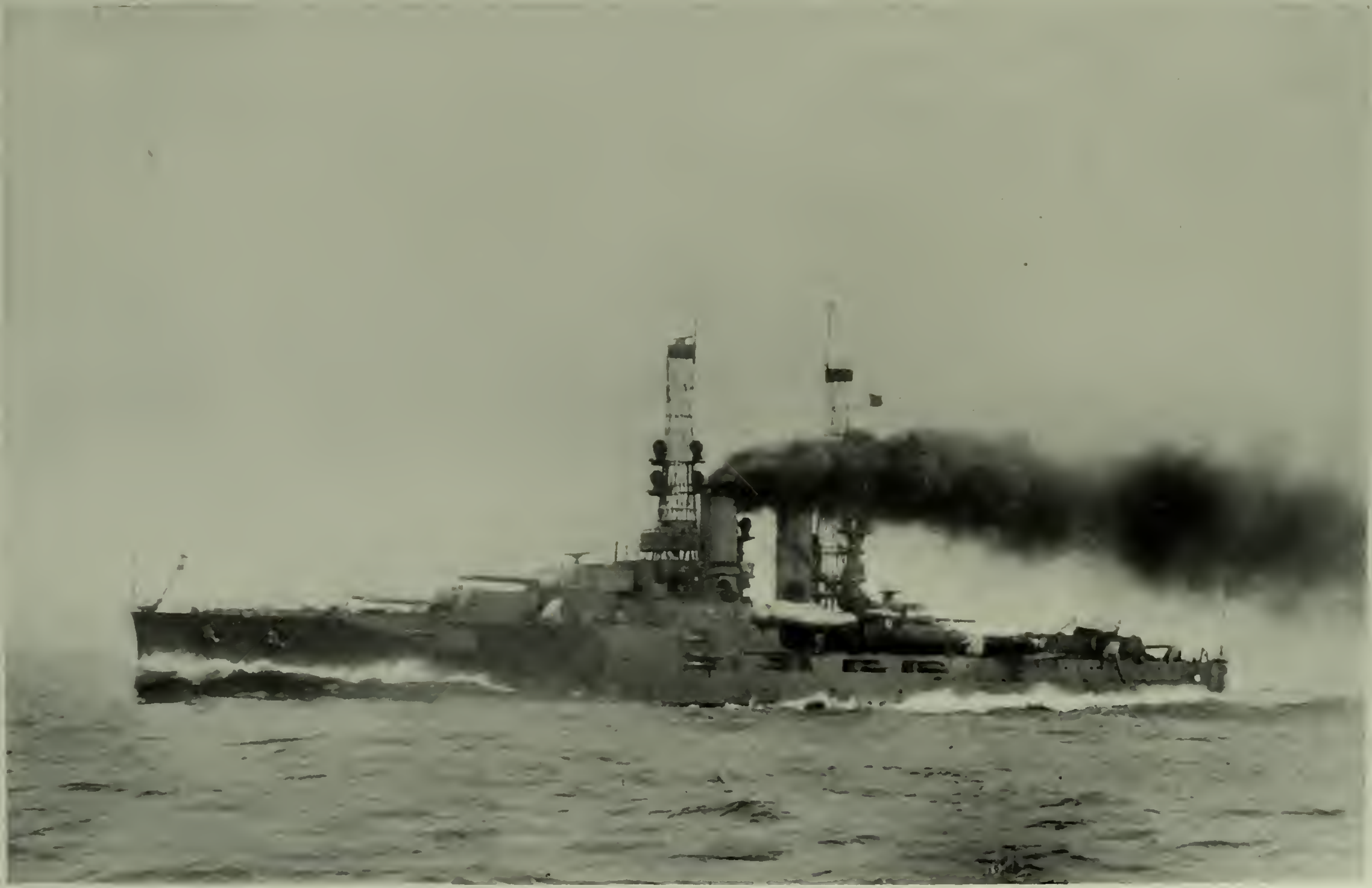
DELAWARE (Battleship)

Displacement, 20,000 tons. Length, 510 feet. Beam, 85 feet 2½ inches. Draft, 26 feet 11 inches. Engines, 2 vertical triple expansion; boilers, 14 Babcock & Wilcox. Horsepower, 29,043. Speed on trial (mean), 21.56 knots. Armament, ten 12-inch, fourteen 5-inch, under 4-inch four, and two 21-inch torpedo tubes. Complement, 52 officers and 893 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1910. Photograph taken, 1911. Same class, North Dakota.



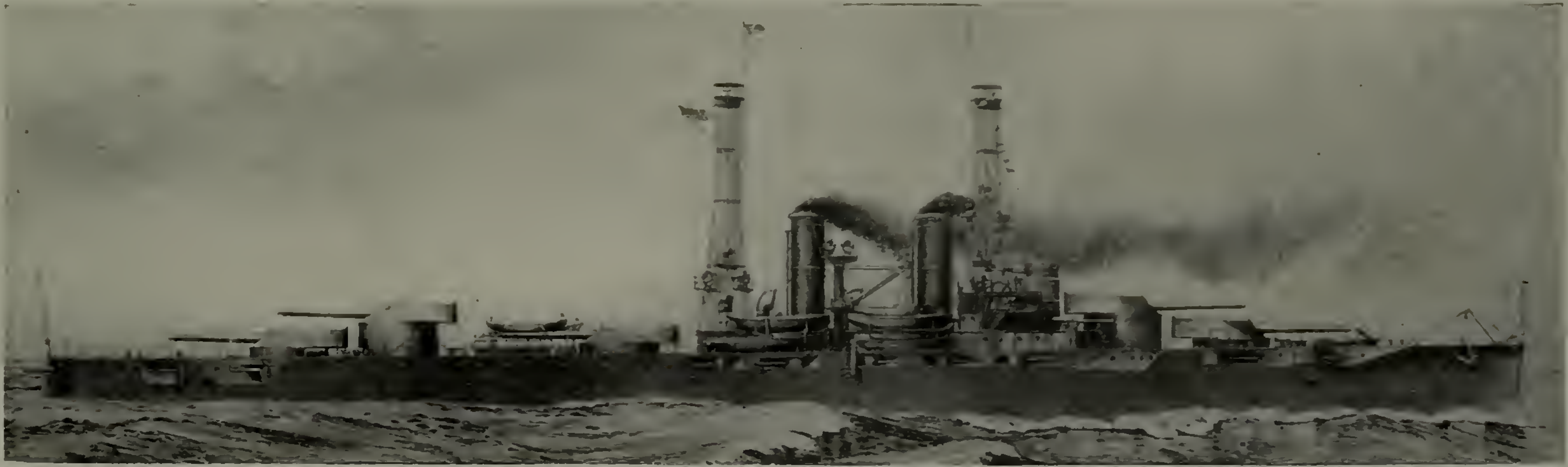
UTAH (Battleship)

Displacement, 21,825 tons. Length, 510 feet. Beam, 88 feet 2½ inches. Draft, 28 feet 6 inches. Engines, 4 Parsons turbines; boilers, 12 Babcock & Wilcox. Horsepower, 28,000. Speed on trial (mean), 21.04 knots. Armament, ten 12-inch, sixteen 5-inch, under 4-inch four, and two 21-inch torpedo tubes. Complement, 60 officers and 888 men. Built by New York Shipbuilding Co., Camden, N. J., 1911. Photograph taken on trial, 1911, at 21.32 knots. Same class, Florida.



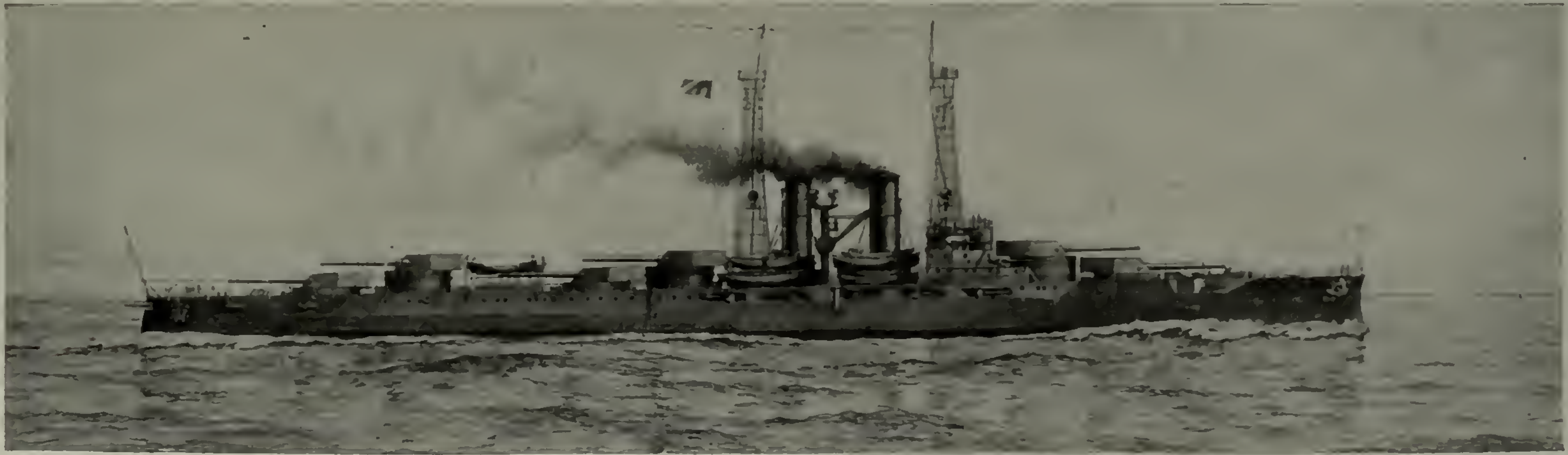
FLORIDA (Battleship)

Displacement, 21,825 tons. Length, 510 feet. Beam, 88 feet 2½ inches. Draft, 28 feet 6 inches. Engines, 4 Parsons turbines; boilers, 12 Babcock & Wilcox. Horsepower, 28,000. Speed on trial (mean), 21.954 knots. Armament, ten 12-inch, sixteen 5-inch, under 4-inch four, and two 21-inch torpedo tubes. Complement, 60 officers and 888 men. Built by New York Navy Yard, 1911. Photograph taken, 1912, at trial, at 21.54 knots.



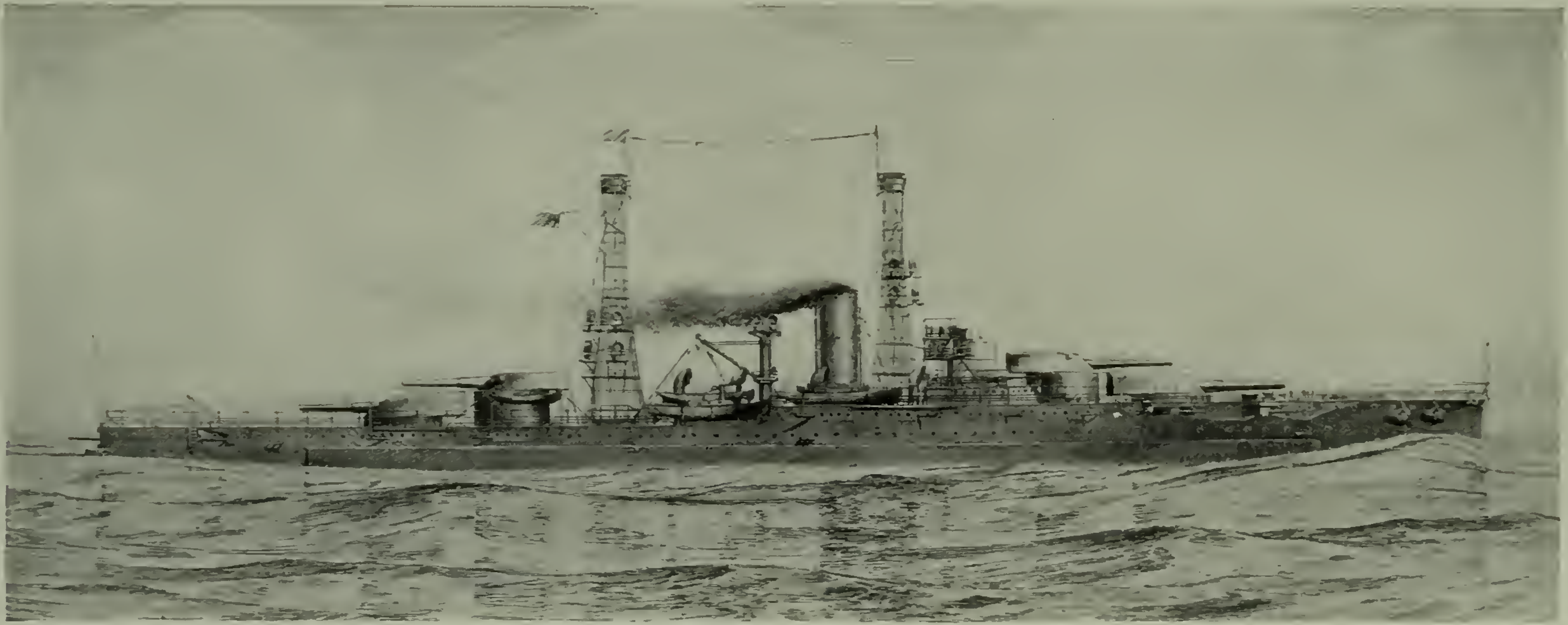
NEW YORK AND TEXAS (Battleships)

Displacement, 27,000 tons. Length, 565 feet. Beam, 95 feet 2½ inches. Draft, 28 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 14 Babcock & Wilcox. Horsepower, 28,100. Estimated speed, 21 knots. Armament, ten 14-inch, twenty-one 5-inch, under 4-inch four. Complement, 63 officers, 1,009 men. NEW YORK.—Under construction at the New York Navy Yard. TEXAS.—Under construction at Newport News Shipbuilding & Dry Dock Co. Contract date for completion, Dec. 17, 1913.



WYOMING AND ARKANSAS (Battleships)

Displacement, 26,000 tons. Length, 554 feet. Beam, 93 feet 2½ inches. Draft, 28 feet 6 inches. Engines, 4 Parsons turbines; boilers, 12 Babcock & Wilcox. Horsepower, 28,000 (estimated). Speed, 20.50 knots (estimated). Armament, twelve 12-inch, twenty-one 5-inch, under 4-inch three. Complement, 62 officers, 978 men. WYOMING.—Under construction at Wm. Cramp & Sons Co., Philadelphia, Pa. ARKANSAS.—Under construction at New York Shipbuilding Co., Camden, N. J. Both will be completed during 1912.



BATTLESHIPS NOS. 36 AND 37

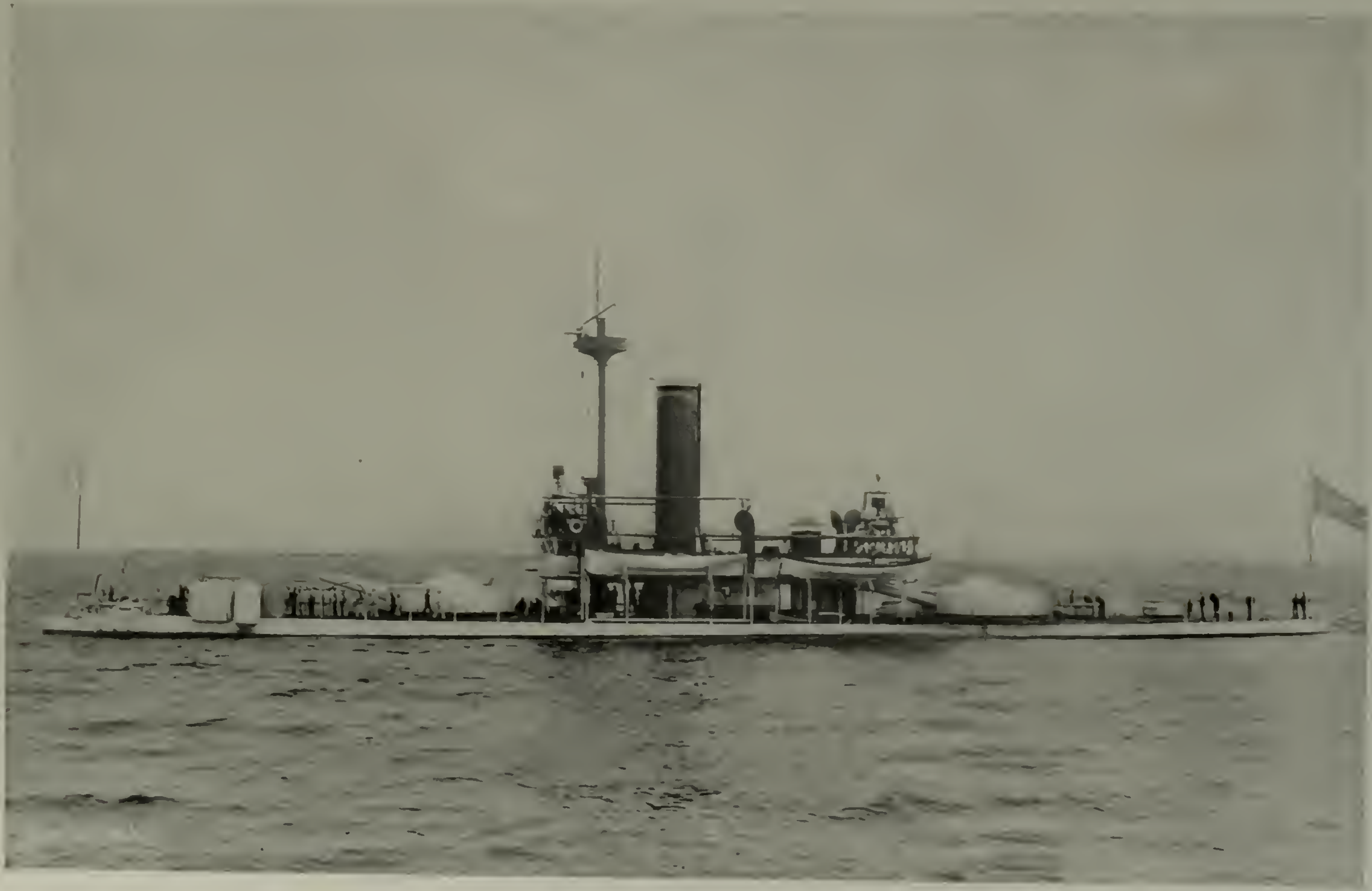
The plans and specifications for first-class battleships No. 36, NEVADA, and No. 37, OKLAHOMA, authorized by act of Congress approved March 4, 1911, were completed and circular signed by the Secretary of the Navy, October 18, 1911, and issued to the bidders upon request after November 1, 1911.

The general dimensions and features of each vessel are as follows:

Length on designer's water line	575 feet.
Breadth, extreme, at designer's water line	95 ft. 2⅝ in.
Mean trial displacement	27,500 tons.
Mean draft to bottom of keel at trial displacement, (about)	28 ft. 6 in.
Total fuel-oil storage	2,000 tons.
Fuel oil carried on trial	1,333 tons.
Feed water carried on trial	165 tons.
Speed on trial, not less than	20½ knots.

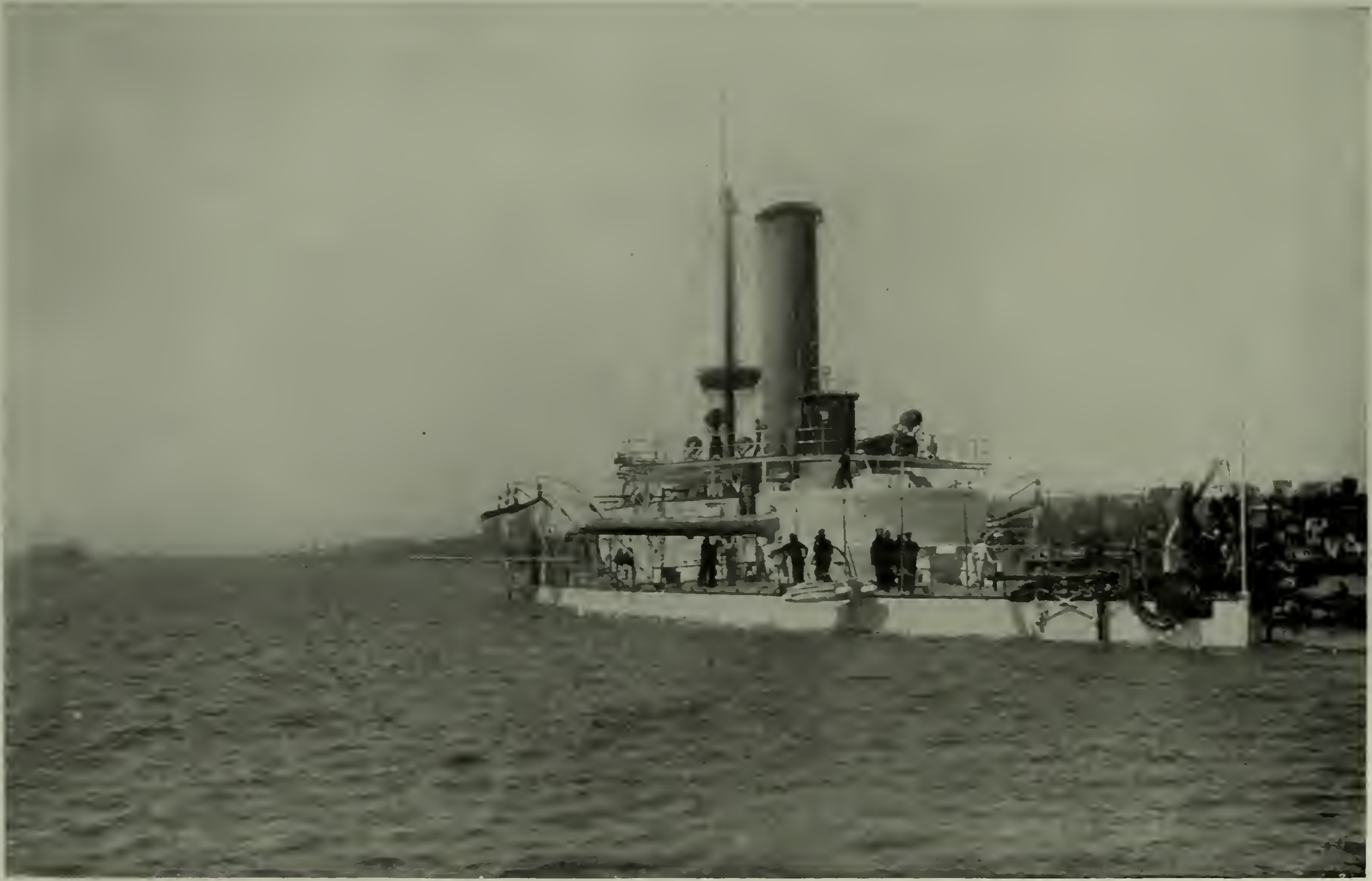
ARMAMENT:—Main battery: ten 14-inch 45-caliber breech-loading rifles; four submerged torpedo tubes. Secondary battery: twenty-one 5-inch rapid-fire guns, 51-caliber; four 3-pounder saluting guns; two 1-pounder semiautomatic guns for boats; two 3-inch field pieces; two machine guns, .30-caliber.

Time of completion—36 months from date of contract.
Contract for the U. S. S. NEVADA was entered into with the Fore River Shipbuilding Co., January 22, 1912.
Contract for the U. S. S. OKLAHOMA was entered into with the New York Shipbuilding Co., January 22, 1912.



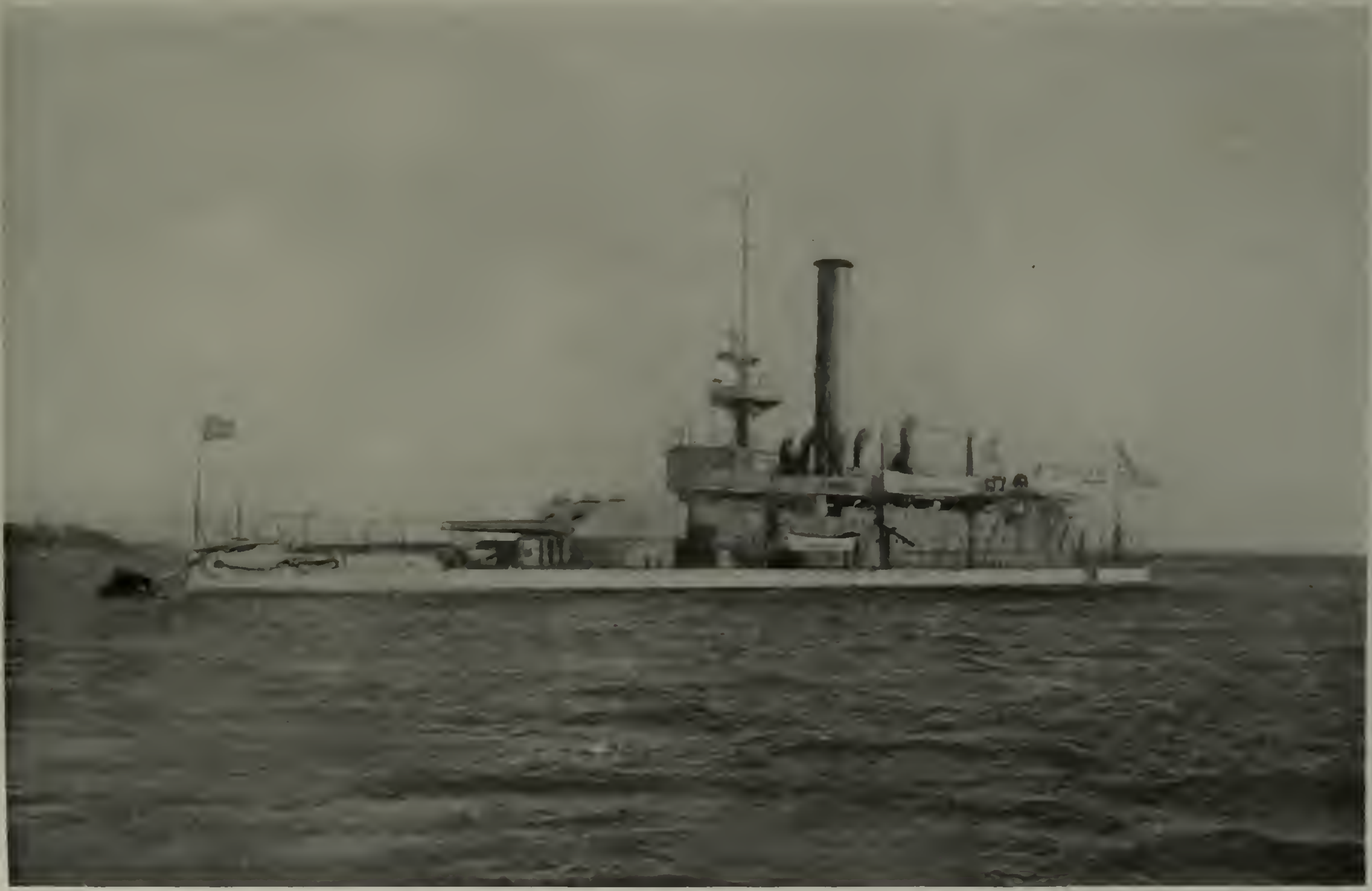
MIANTONOMOH (Monitor)

Displacement, 3,990 tons. Length, 260 feet 3 inches. Beam, 55 feet 4 inches. Draft, 14 feet 6 inches. Engines, 2 inclined compound; boilers, 6 Scotch. Horsepower, 1,600. Speed at trial (mean), 10.50 knots. Armament, four 10-inch, under 4-inch six. Complement, 26 officers, 156 men. Built by John Roach, Chester, Pa., and Navy Yard, N. Y., 1891. Photograph taken, 1893.



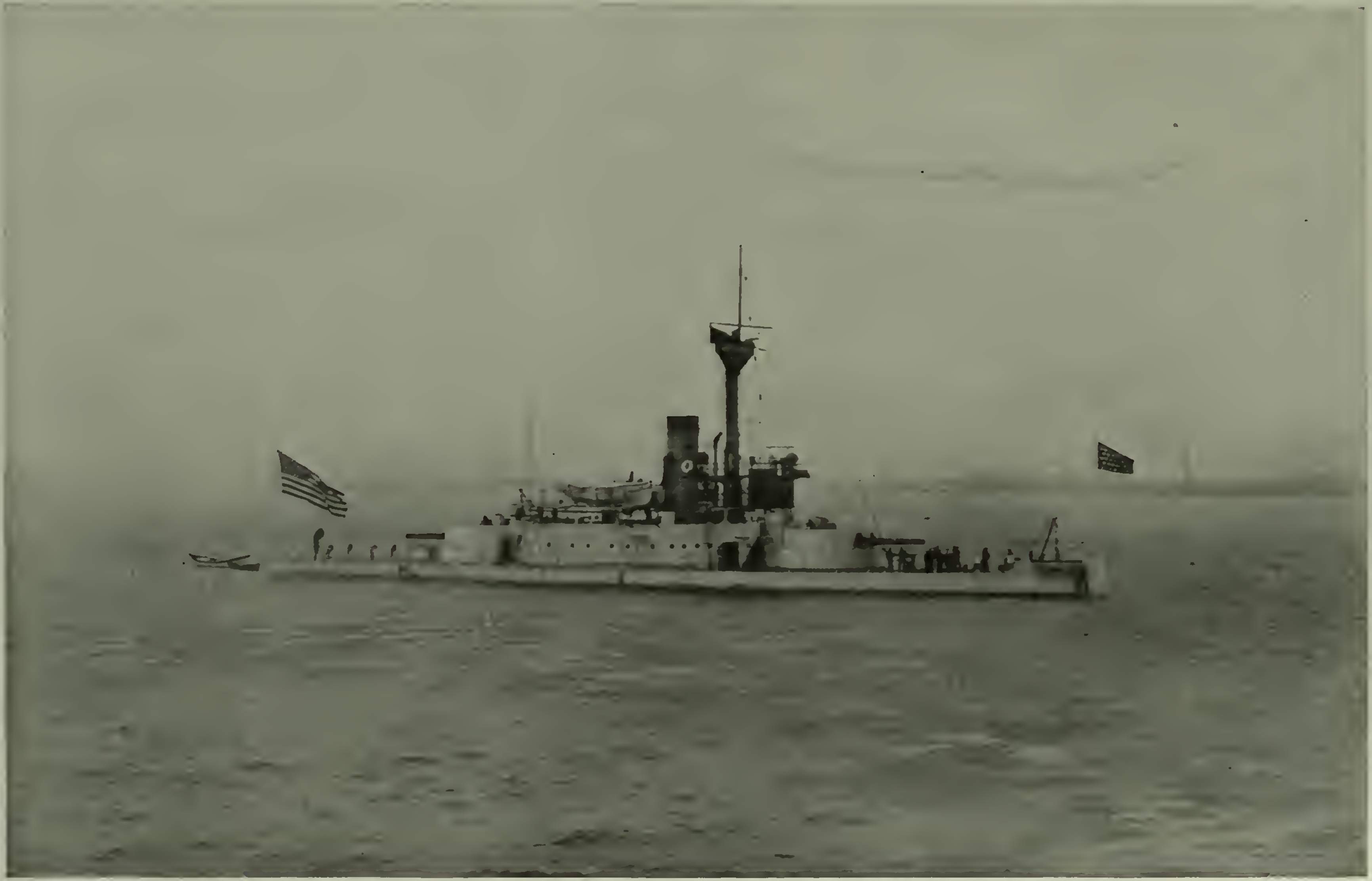
MONTEREY (Monitor)

Displacement, 4,084 tons. Length, 256 feet 1 inch. Beam, 59 feet ½ inch. Draft, 14 feet 10 inches. Engines, 2 vertical triple expansion; boilers, 4 Babcock & Wilcox. Horsepower, 5,244. Speed at trial (mean), 13.60 knots. Armament, two 12-inch, two 10-inch, under 4-inch six. Complement, 19 officers, 212 men. Built by Union Iron Works, San Francisco, Cal., 1893.



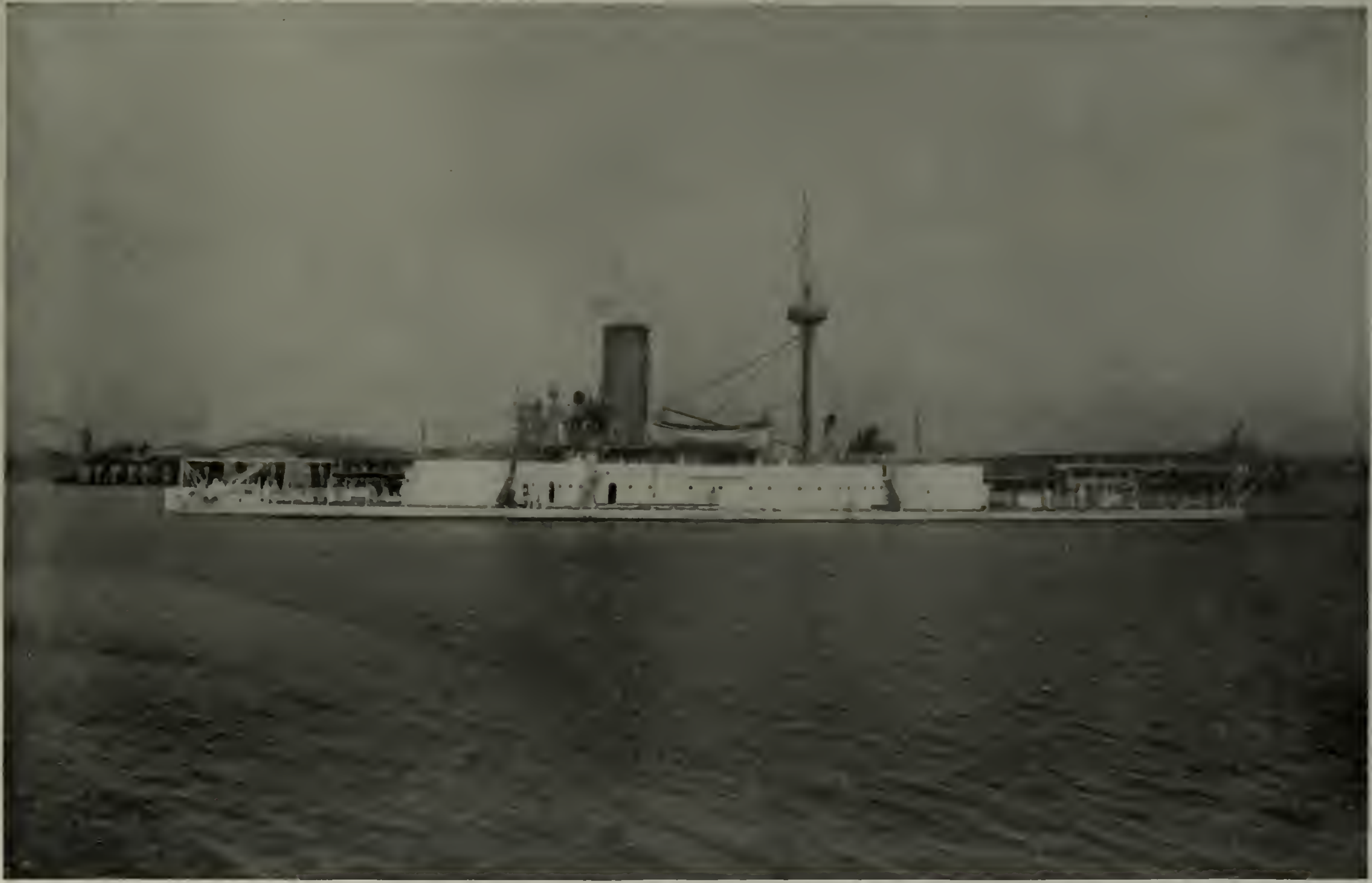
OZARK (formerly Arkansas) (Monitor)

Displacement, 3,225 tons. Length, 252 feet. Beam, 50 feet. Draft, 12 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 4 Thornycroft. Horsepower, 1,739. Speed at trial, 12.03 knots. Armament, two 12-inch, four 4-inch, under 4-inch three. Complement, 13 officers, 209 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1902. Same class, Cheyenne, ex-Wyoming, Tallahassee, ex-Florida, Tonopah, ex-Nevada.



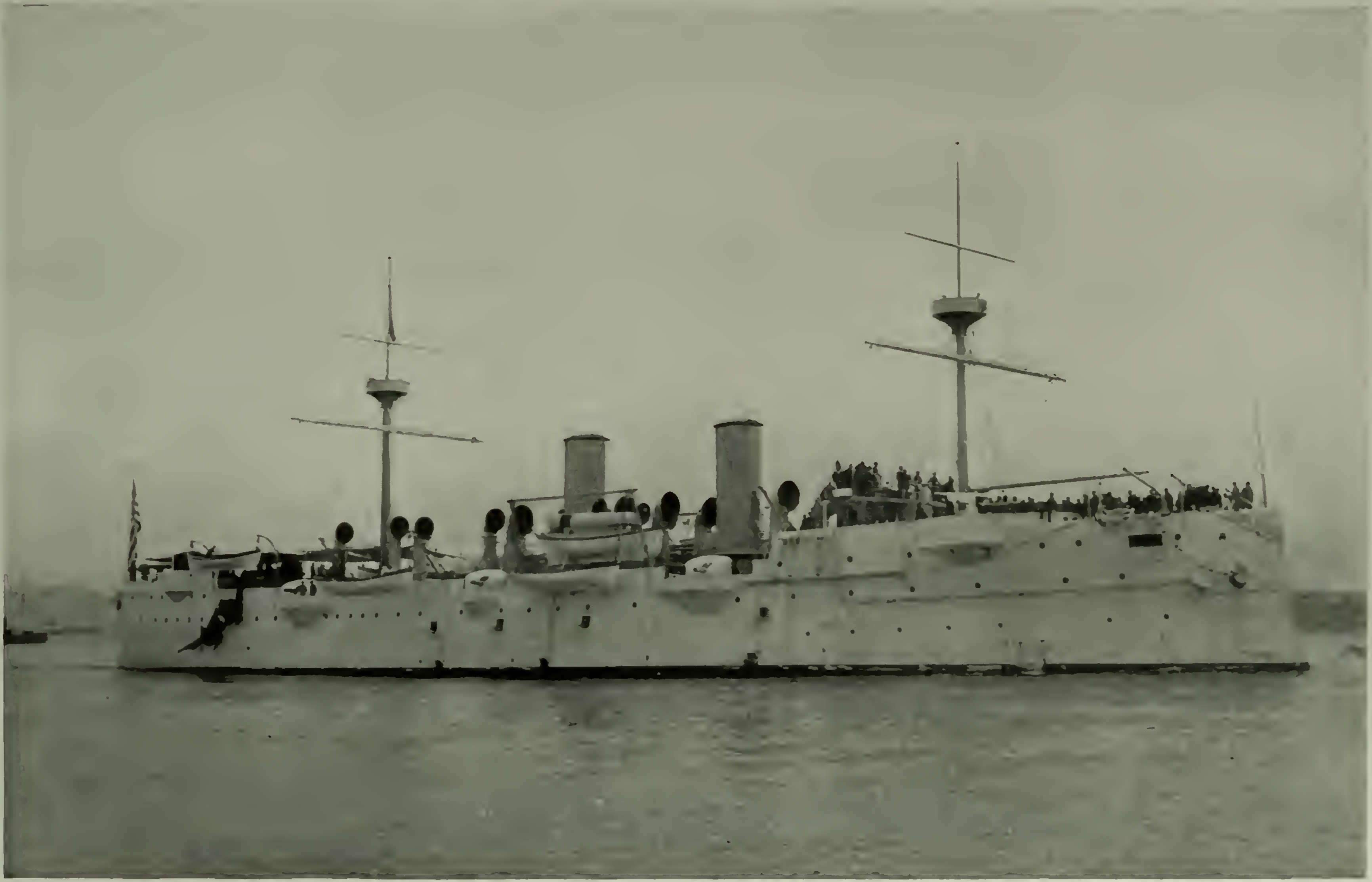
AMPHITRITE (Monitor)

Displacement, 3,990 tons. Length, 259 feet 3 inches. Beam, 55 feet 4 inches. Draft, 14 feet 6 inches. Engines, 2 inclined compound. Boilers, 4 Babcock & Wilcox. Horsepower, 1,600. Speed at trial (mean), 10.50 knots. Armament, four 10-inch, two 4-inch, under 4-inch eight. Complement, 26 officers, 156 men. Built by Harlan & Hollingworth Co., Wilmington, Del., and Navy Yard, Norfolk, 1895. Assigned to Naval Militia, Missouri, 1910. Photograph taken, 1896.



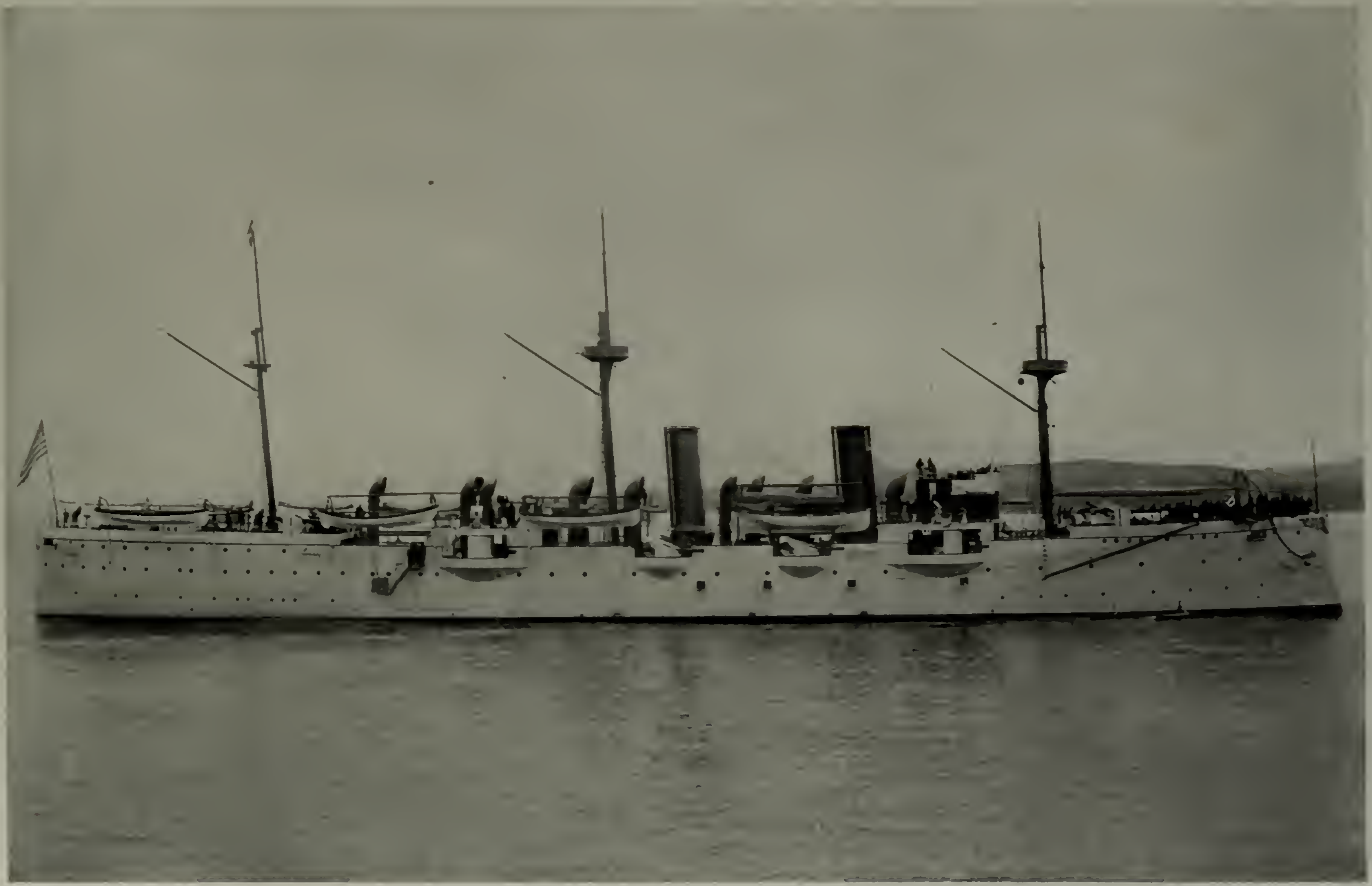
PURITAN (Monitor)

Displacement, 6,060 tons. Length, 290 feet 3 inches. Beam, 60 feet 1½ inches. Draft, 18 feet. Engines, 2 horizontal compound; boilers, 8 Scotch. Horsepower, 3,700. Speed at trial (mean), 12.40 knots. Armament, four 12-inch, six 4-inch, under 4-inch six. Complement, 19 officers, 210 men. Built by John Roach, Chester, Pa., and Navy Yard, New York, 1896.



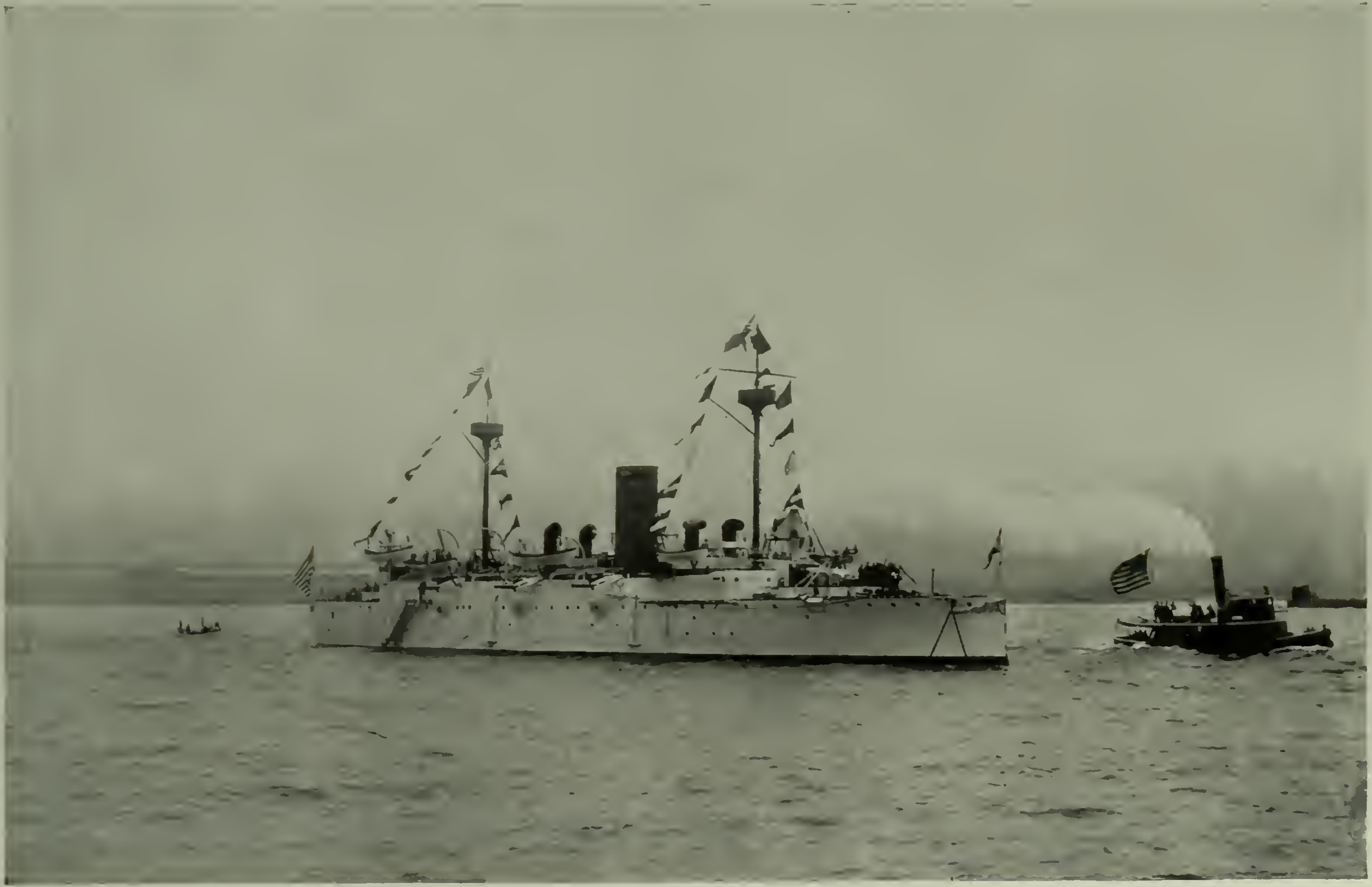
BALTIMORE (Protected Cruiser)

Displacement, 4,413 tons. Length, 327 feet 6 inches. Beam, 48 feet 7½ inches. Draft, 19 feet 6 inches. Engines, 2 horizontal triple expansion; boilers, 8 Babcock & Wilcox. Horsepower, 8,777. Speed on trial (mean), 20.10 knots. Armament, four 8-inch, six 6-inch, under 4-inch ten. Complement, 36 officers, 360 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1898. Was at Battle of Manila Bay, 1898. Receiving ship, Navy Yard, Charleston, S. C., 1911. Photograph taken, 1890.



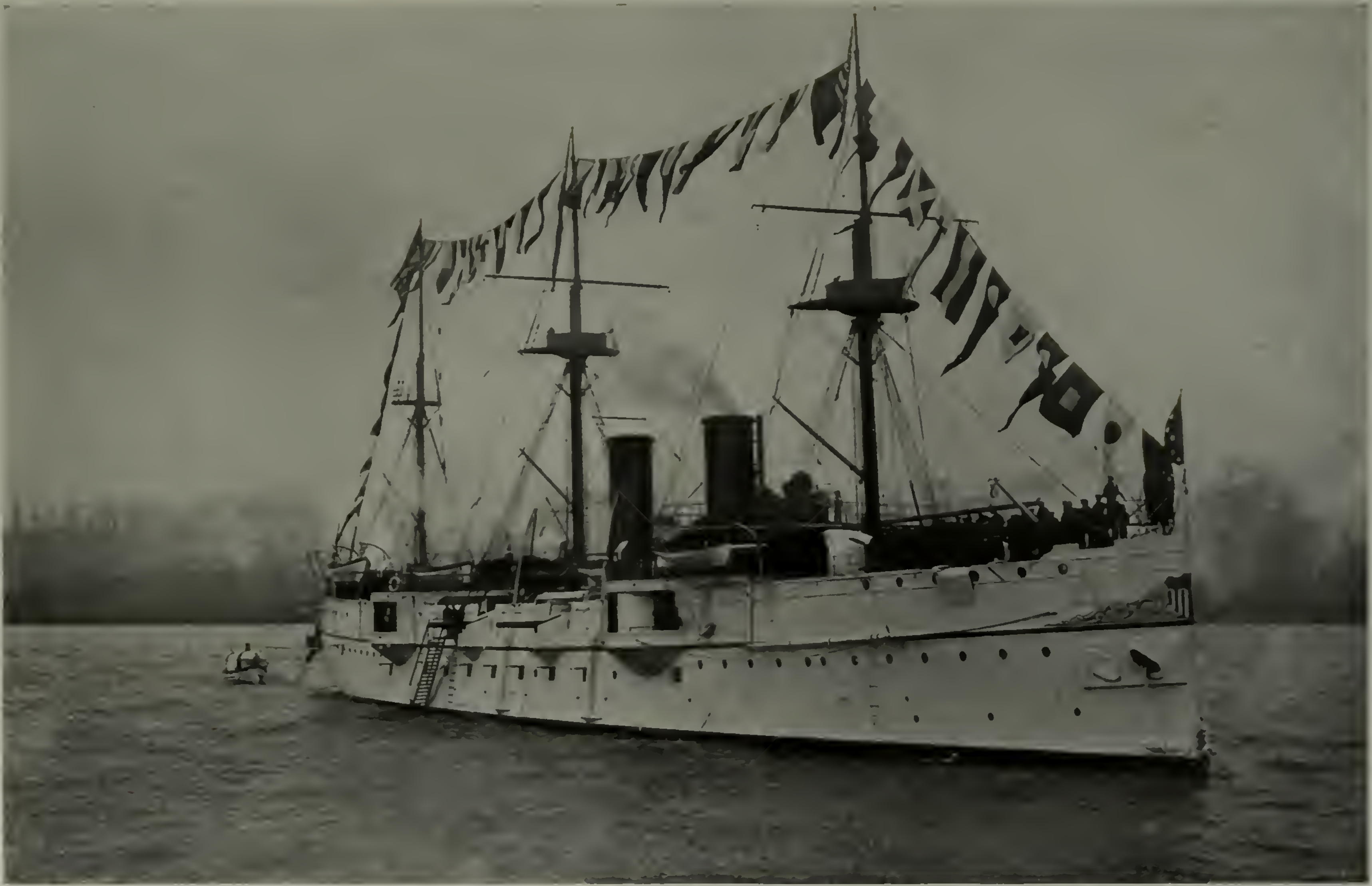
PHILADELPHIA (Protected Cruiser)

Displacement, 4,324 tons. Length, 327 feet 6 inches. Beam, 48 feet 8 inches. Draft, 19 feet 2 inches. Engines, 2 horizontal triple expansion; boilers, 4 Scotch. Horsepower, 8,815. Speed on trial (mean), 19.7 knots. Armament, twelve 6-inch, under 4-inch thirteen. Complement, 34 officers, 300 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1890. Photograph taken, 1891. Used as receiving ship, Puget Sound Navy Yard, 1911.



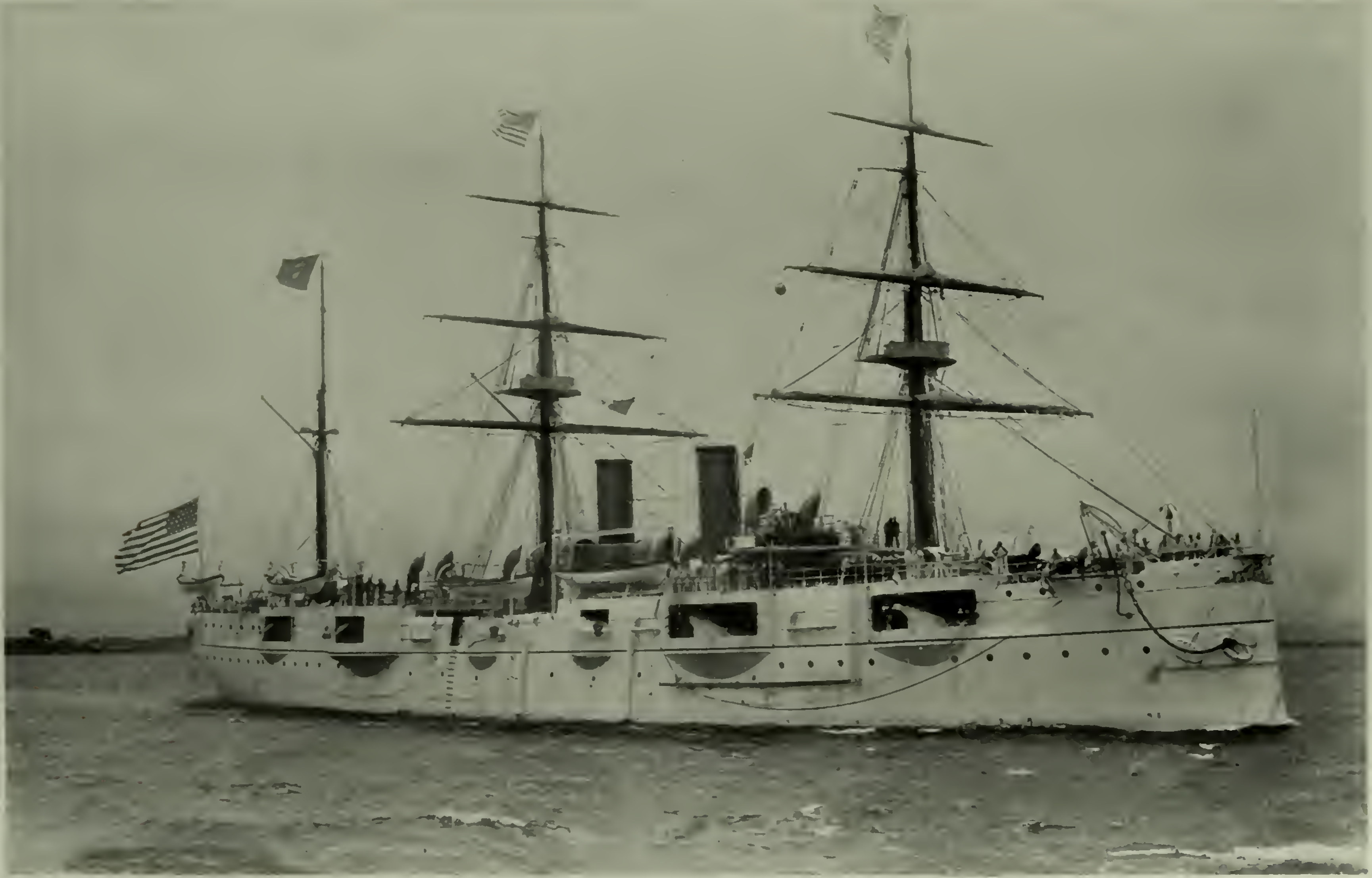
CHARLESTON (Protected Cruiser)

Displacement, 3,730 tons. Length, 312 feet 6 inches. Beam, 46 feet 2 inches. Draft, 18 feet 7 inches. Engines, 2 horizontal compound; boilers, 7 Scotch. Horsepower, 6,666. Speed on trial (mean), 18.20 knots. Armament, two 8-inch, six 6-inch, under 4-inch twelve. Complement, 20 officers, 286 men. Built by Union Iron Works, San Francisco, Cal., 1889. Wrecked off Philippine Islands in 1899. Photograph taken, 1893.



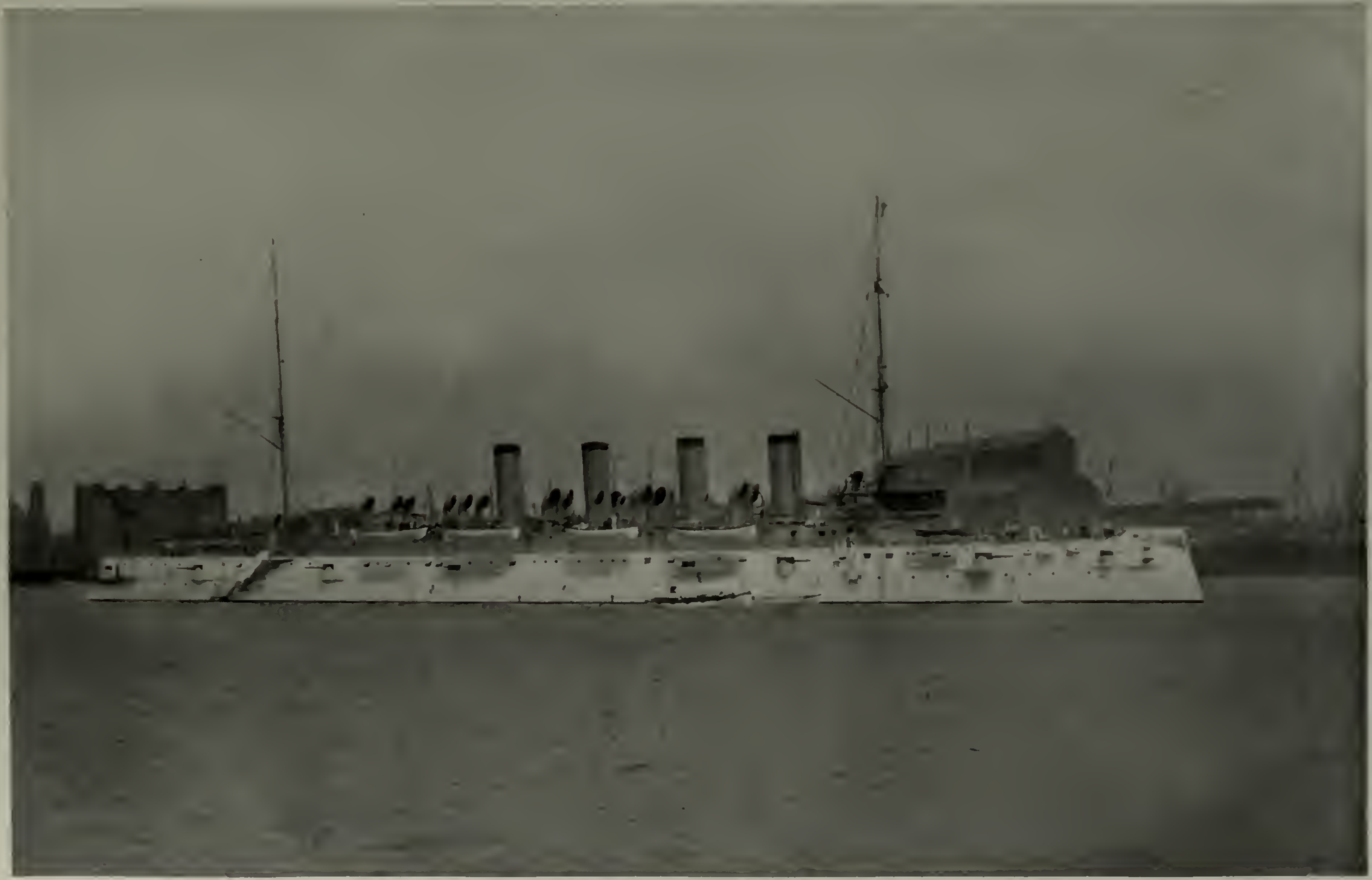
SAN FRANCISCO (Protected Cruiser)

Displacement, 4,083 tons. Length, 310 feet. Beam, 49 feet 2 inches. Draft, 18 feet 9 inches. Engines, 2 horizontal triple expansion; boilers, 8 Babcock & Wilcox. Horsepower, 9,913. Speed at trial (mean), 19.52 knots. Armament, twelve 6-inch, under 4-inch ten. Complement, 35 officers, 360 men. Built by Union Iron Works, San Francisco, Cal., 1890. Photograph taken, 1893. Now fitted as a mine laying vessel.



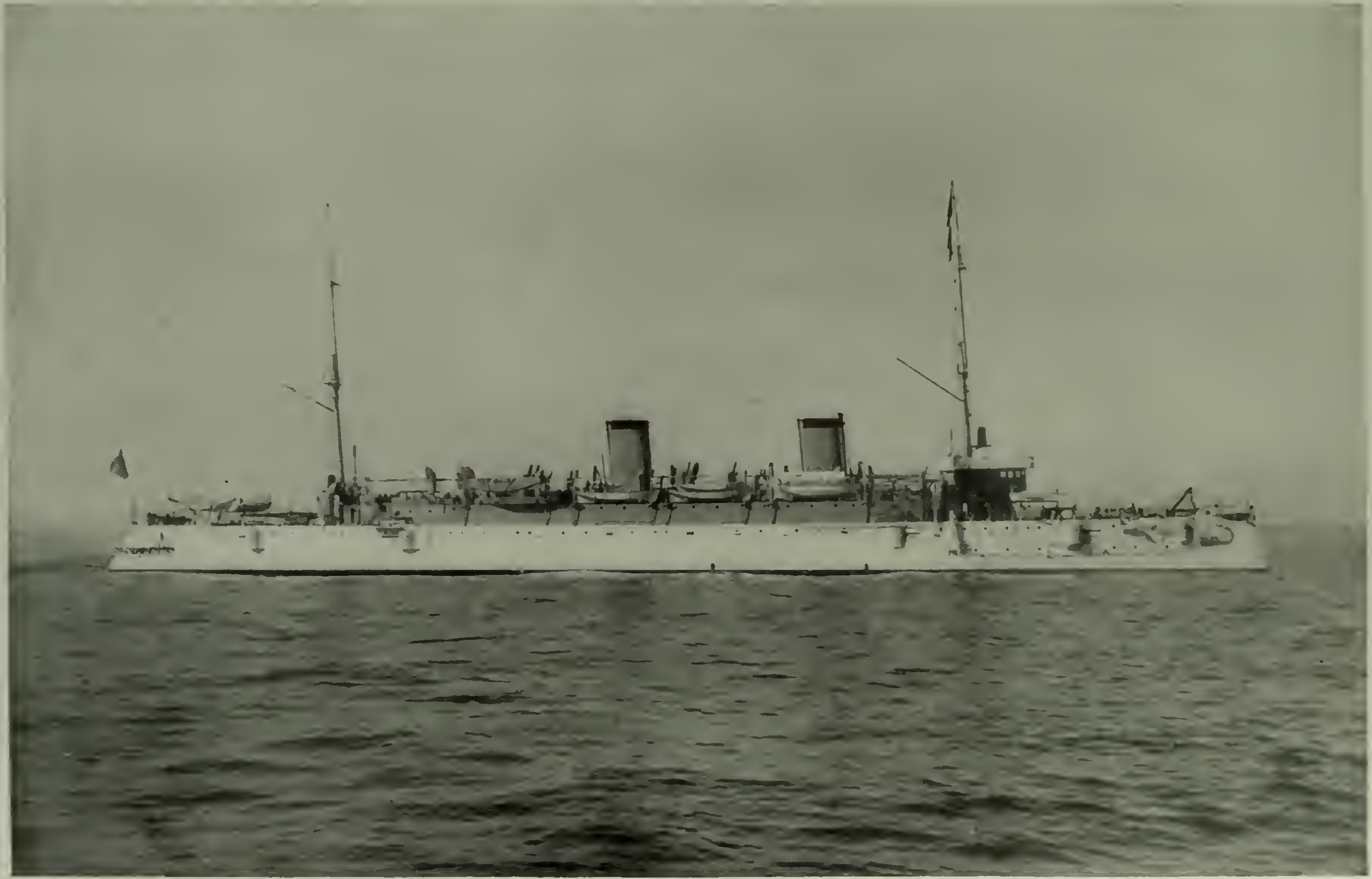
NEWARK (Protected Cruiser)

Displacement, 4,083 tons. Length, 310 feet 5 inches. Beam, 49 feet 2 inches. Draft, 18 feet 9 inches. Engines, 2 horizontal triple expansion; boilers, 4 Scotch. Horsepower, 8,869. Speed, 19 knots (estimated). Armament, twelve 6-inch, under 4-inch eight. Complement, 35 officers, 360 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1890. Photograph taken, 1891.



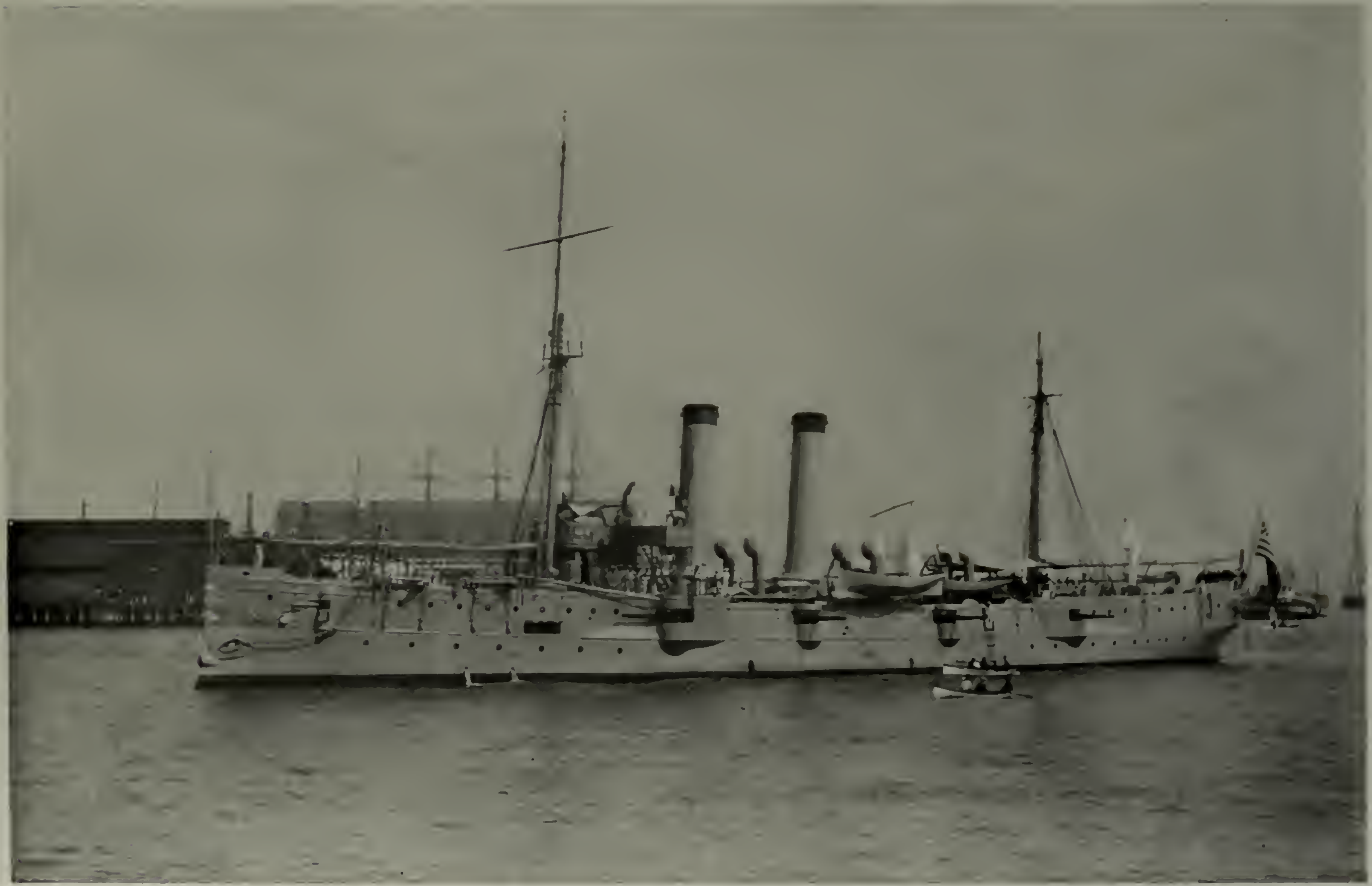
COLUMBIA (Protected Cruiser)

Displacement, 7,350 tons. Length, 411 feet 7 inches. Beam, 58 feet 2 inches. Draft, 22 feet 6 inches. Engines, 3 vertical triple expansion; boilers, 10 Scotch. Horsepower, 18,269. Speed at trial (mean), 22.80 knots. Armament, three 6-inch, eight 4-inch, under 4-inch twelve. Complement, 18 officers, 360 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa.,1893. Photograph taken, 1904. Same class, Minneapolis.



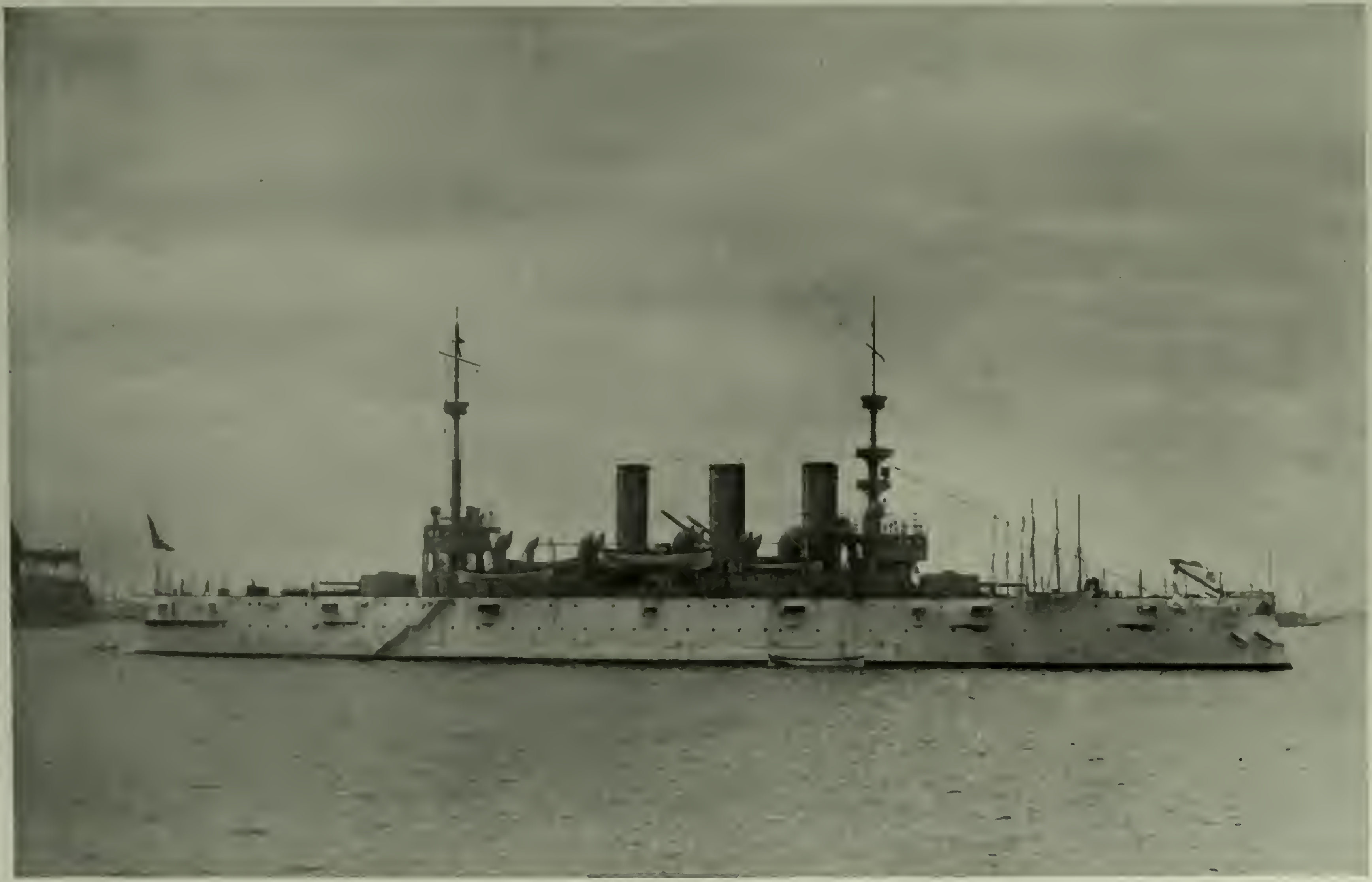
MINNEAPOLIS (Protected Cruiser)

Displacement, 7,350 tons. Length, 411 feet 7 inches. Beam, 58 feet 2 inches. Draft, 22 feet 6 inches. Engines, 3 vertical triple expansion; boilers, 10 Scotch. Horsepower, 20,544. Speed at trial (mean), 23.07 knots. Armament, three 6-inch, eight 4-inch, under 4-inch twelve. Complement, 18 officers, 360 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1894. Photograph taken, 1904.



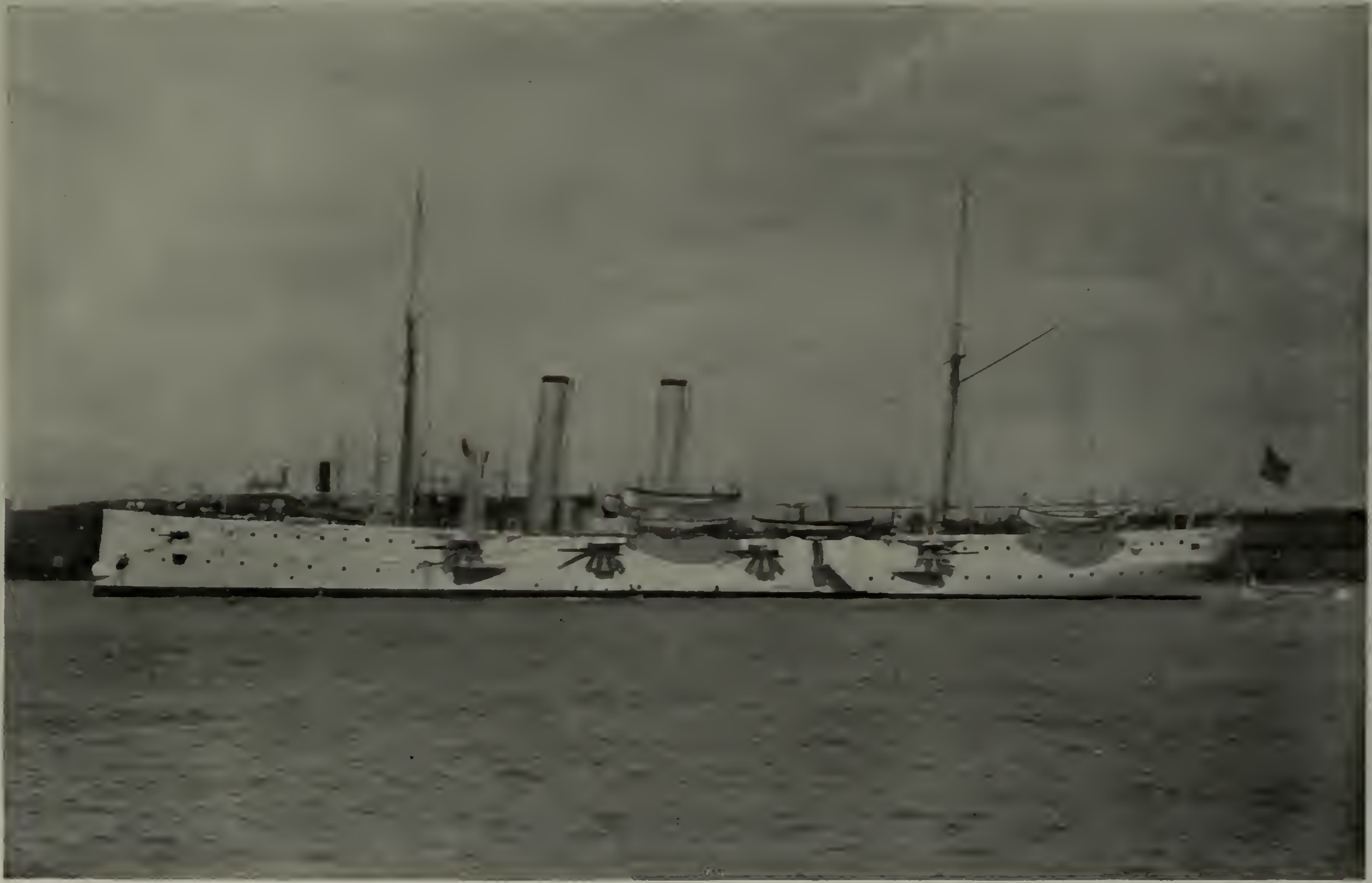
DETROIT (Unprotected Cruiser)

Displacement, 2,072 tons. Length, 257 feet. Beam, 37 feet. Draft, 14 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 5 Scotch. Horsepower, 5,227. Speed at trial (mean), 18.71 knots. Armament, ten 5-inch, under 4-inch eleven. Complement, 20 officers, 239 men. Built by Columbian Iron Works, Baltimore, Md., 1893. Photograph taken, 1898. Sold, 1911.



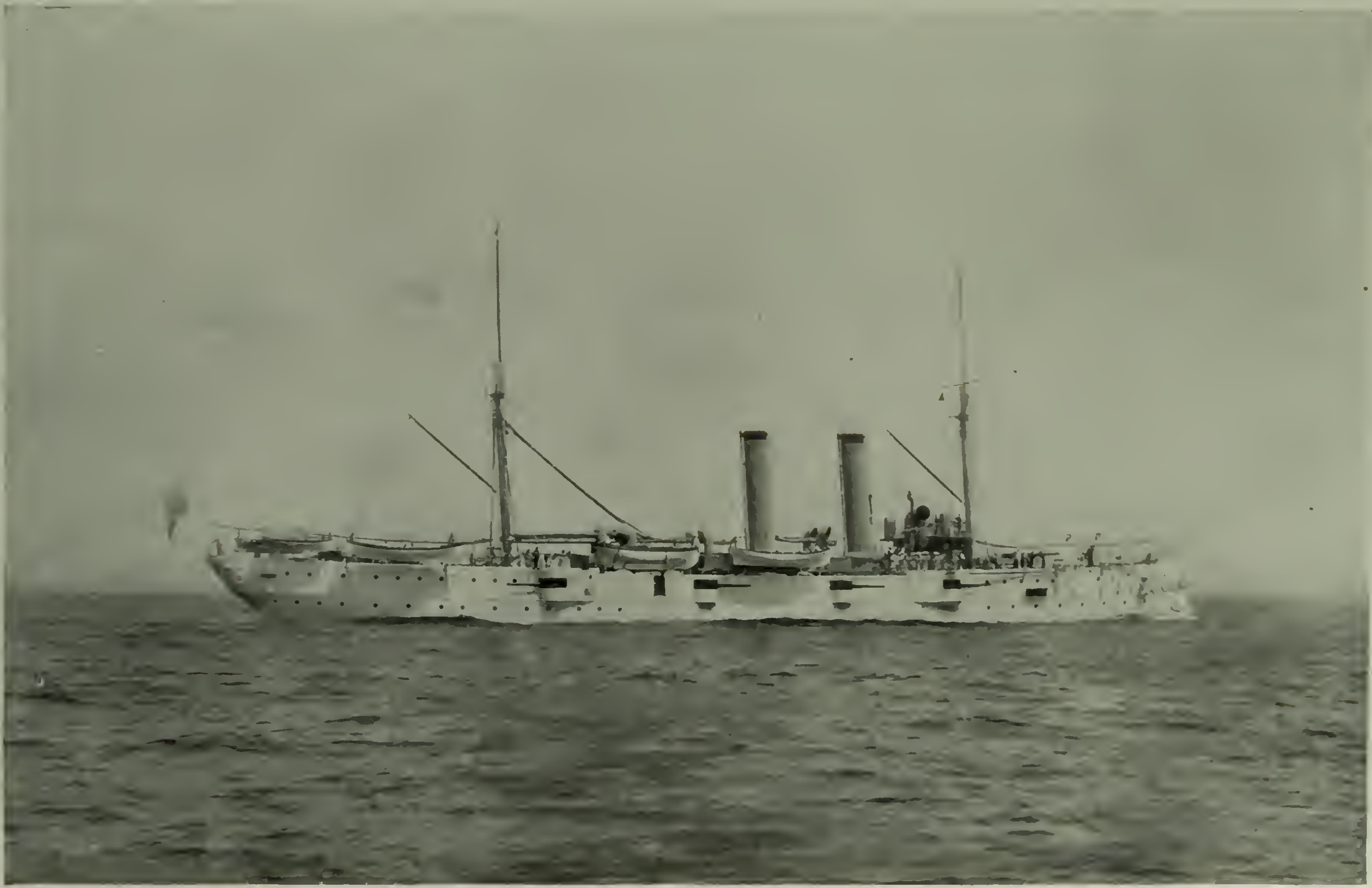
NEW YORK (Now Saratoga) (Protected Cruiser)

Displacement, 8,150 tons. Length, 380 feet 6 inches. Beam, 64 feet 10 inches. Draft, 23 feet 3 inches. Engines, 4 vertical triple expansion; boilers, 12 Babcock & Wilcox. Horsepower, 17,075. Speed at trial (mean), 21 knots. Armament, four 8-inch, ten 5-inch, under 4-inch twelve. Complement, 34 officers, 484 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1893. Flagship of Admiral Sampson, at Battle of Santiago, 1898. Photograph taken, 1897.



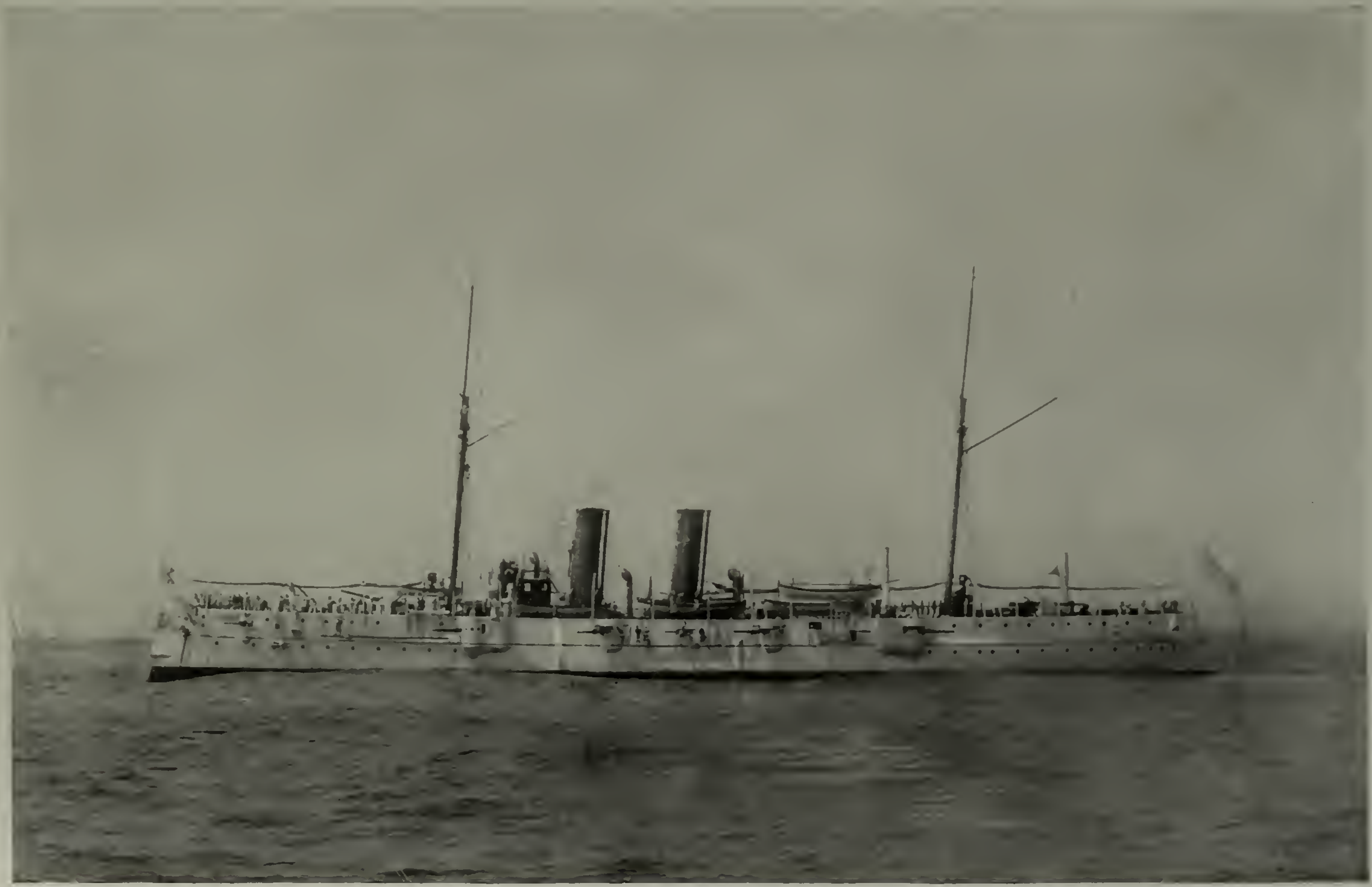
MARBLEHEAD (Unprotected Cruiser)

Displacement, 2,072 tons. Length, 257 feet. Beam, 37 feet. Draft, 14 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 5 Scotch. Horsepower, 4,937. Speed at trial (mean), 18.44 knots. Armament, ten 5-inch, under 4-inch ten. Complement, 20 officers, 239 men. Built by Harrison Loring, Boston, Mass., 1893. Was station ship at Guantanamo during Spanish-American War. Assigned to California Naval Militia, 1909. Photograph taken, 1897.



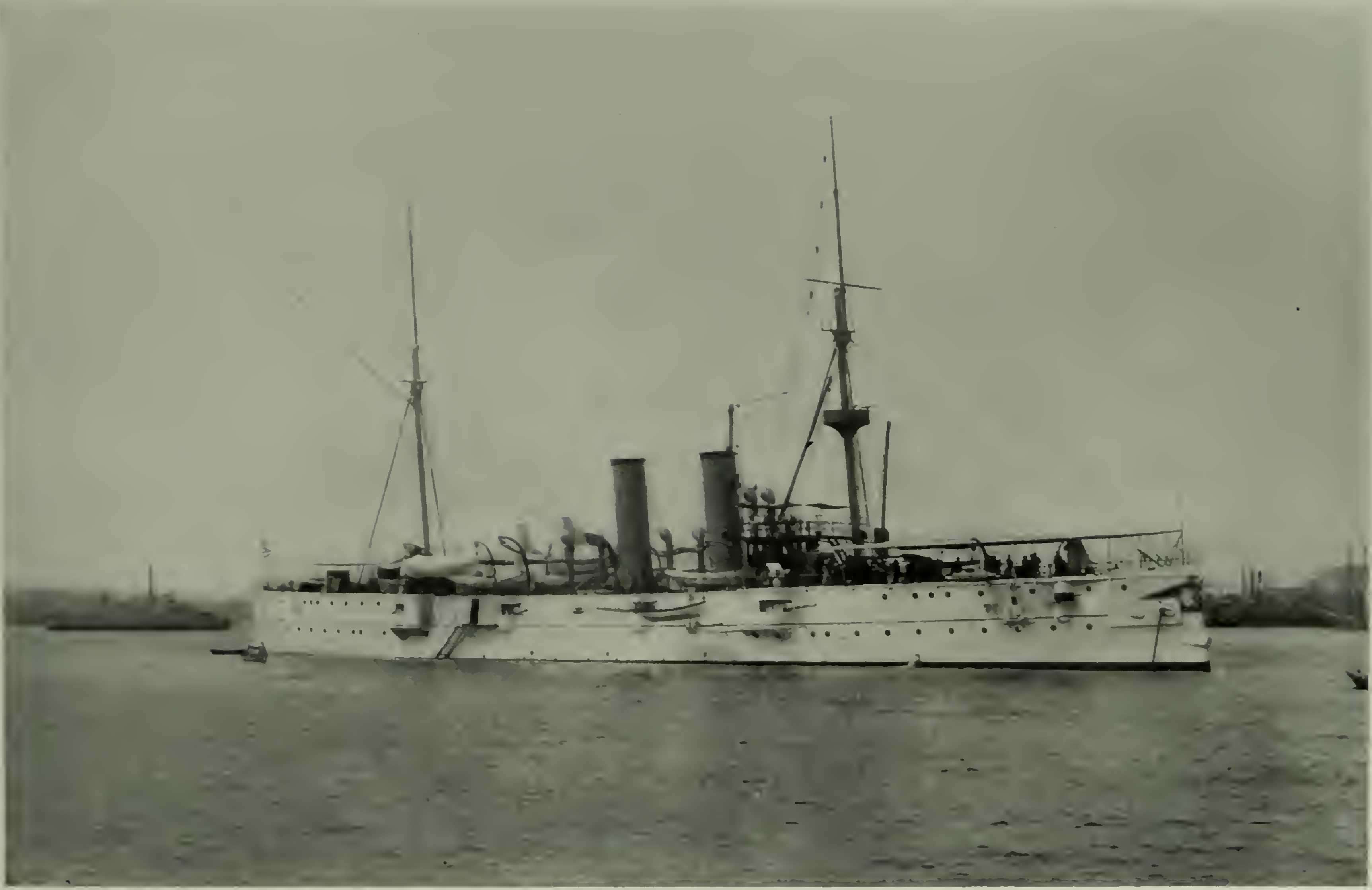
MONTGOMERY (Unprotected Cruiser)

Displacement, 2,072 tons. Length, 257 feet. Beam, 37 feet. Draft, 14 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 6 Almy. Horsepower, 5,543. Speed at trial (mean), 19.06 knots. Armament, ten 5-inch, under 4-inch ten. Complement, 20 officers, 239 men. Built by Columbian Iron Works, Baltimore, Md., 1893. Photograph taken, 1895. Now fitted as a torpedo practice ship. Same class, Marblehead and Detroit.



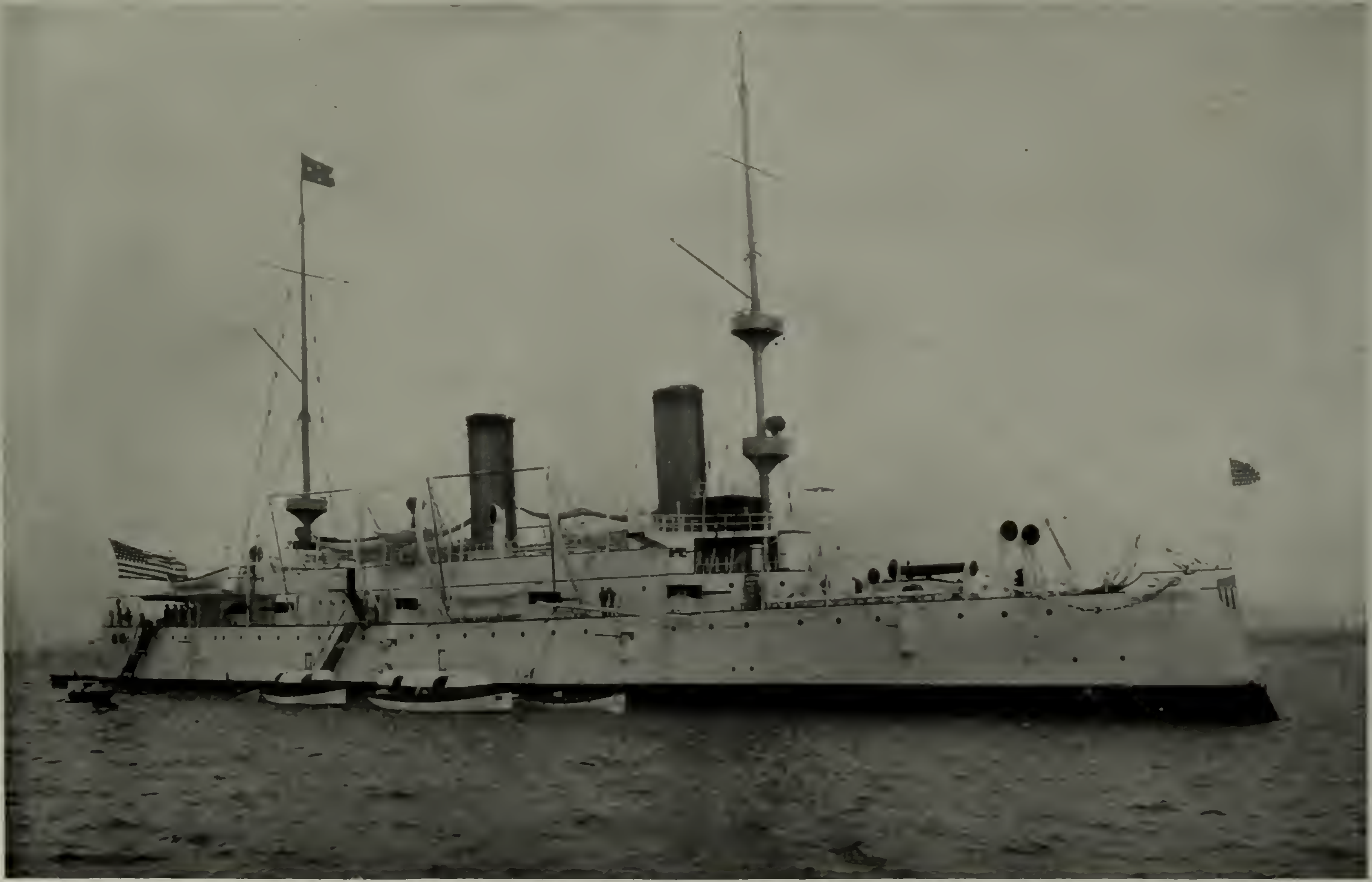
CINCINNATI (Protected Cruiser)

Displacement, 3,183 tons. Length, 300 feet. Beam, 42 feet. Draft, 18 feet. Engines, 2 vertical triple expansion; boilers, 8 Babcock & Wilcox. Horsepower, 8,290. Speed at trial, 19.91 knots. Armament, eleven 5-inch, under 4-inch thirteen. Complement, 20 officers, 302 men. Built at New York Navy Yard, 1894. Photograph taken, 1895.



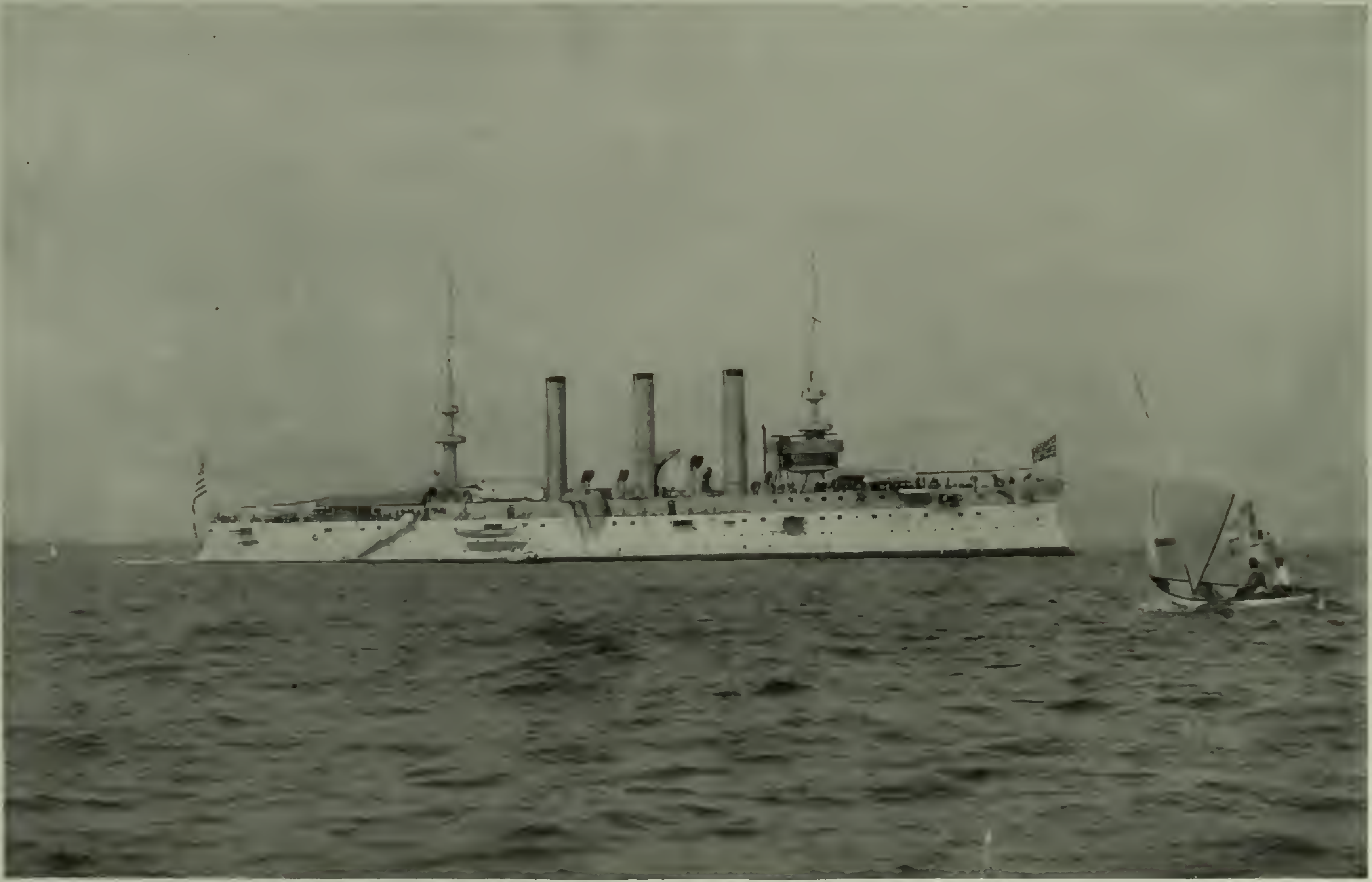
RALEIGH (Protected Cruiser)

Displacement, 3,183 tons. Length, 300 feet. Beam, 42 feet. Draft, 18 feet. Engines, 2 vertical triple expansion; boilers, 8 Babcock & Wilcox. Horsepower, 8,159. Speed at trial, 21.12 knots. Armament, eleven 5-inch, under 4-inch thirteen. Complement, 20 officers, 302 men. Built at Navy Yard, Norfolk, Va., 1894. Photograph taken, 1895. Same class, Cincinnati. At battle of Manila Bay, 1898.



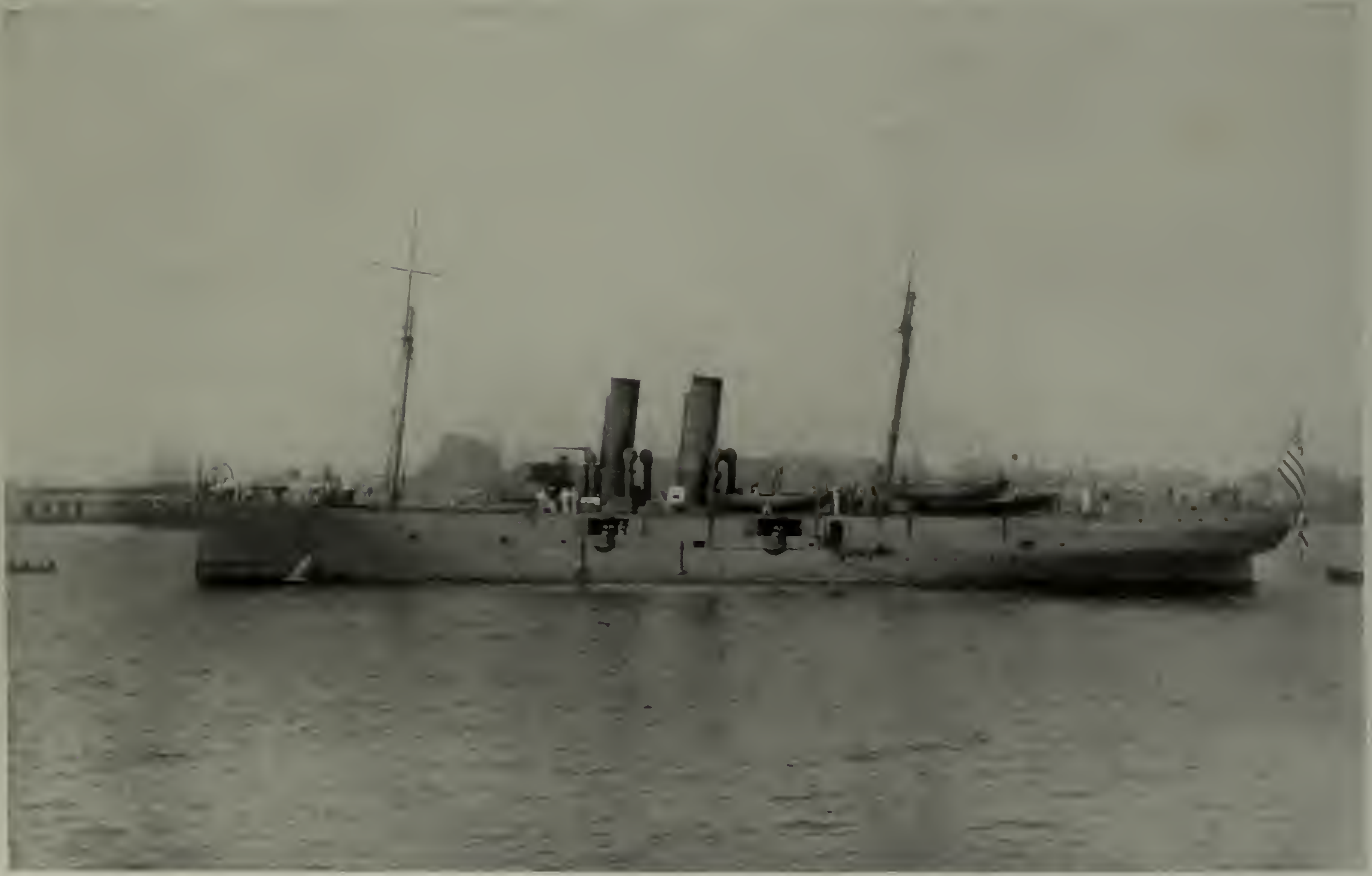
OLYMPIA (Protected Cruiser)

Displacement, 5,865 tons. Length, 340 feet. Beam, 53 feet. Draft, 21 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 6 Scotch. Horsepower, 17,080. Speed on trial (mean), 21.69 knots. Armament, four 8-inch, ten 5-inch, under 4-inch twenty-one. Complement, 20 officers, 426 men. Built by Union Iron Works, San Francisco, Cal., 1894. Flagship of Admiral Dewey, at Battle of Manila Bay, 1898. Photograph taken, 1899.



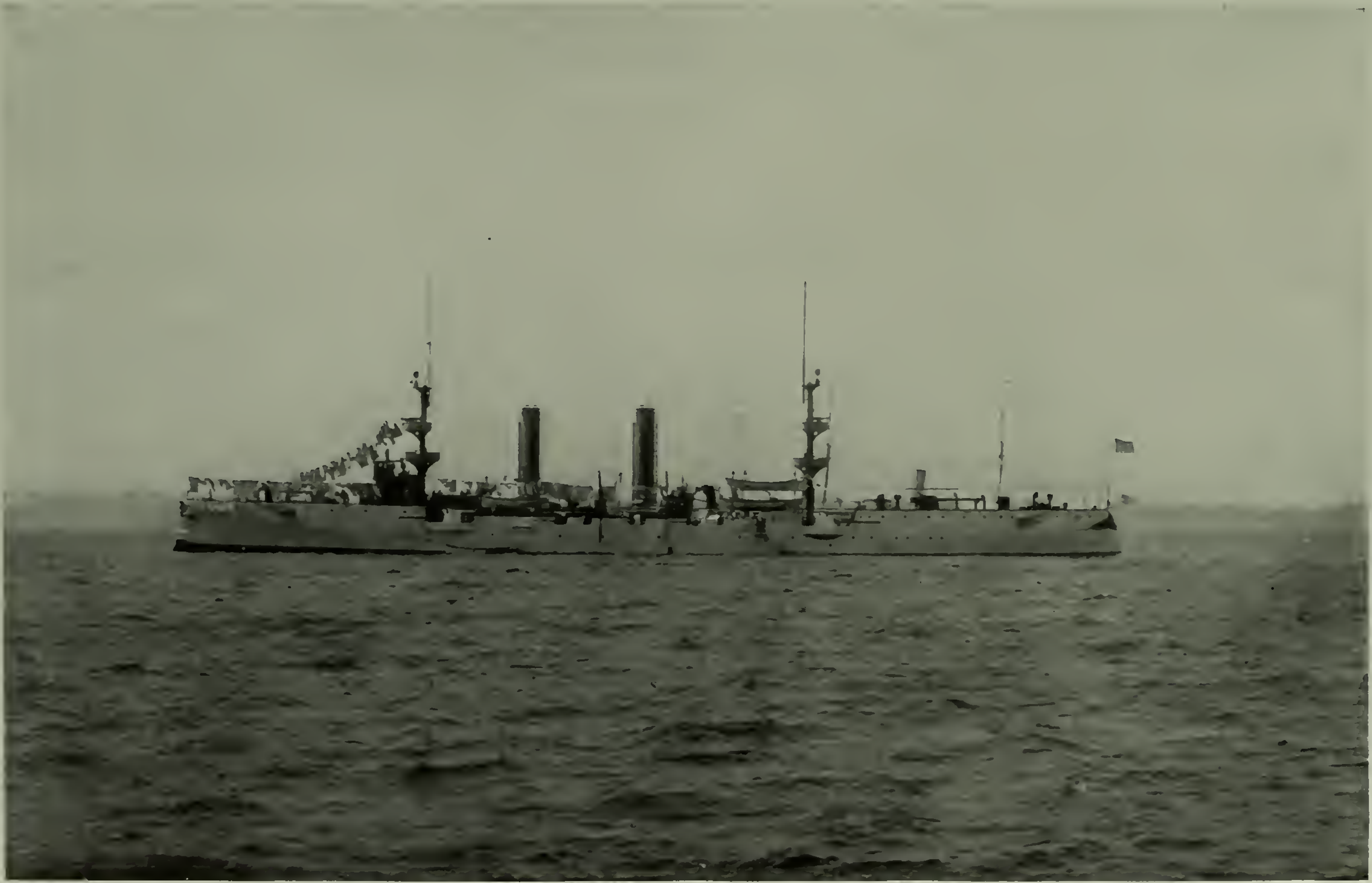
BROOKLYN (Protected Cruiser)

Displacement, 9,215 tons. Length, 400 feet 6 inches. Beam, 64 feet 8 inches. Draft, 24 feet. Engines, 4 vertical triple expansion; boilers, 7 Scotch. Horsepower, 18,425. Speed at trial (mean), 21.91 knots. Armament, eight 8-inch, twelve 5-inch, under 4-inch twelve. Complement, 34 officers, 538 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1896. Photograph taken, 1905. Flagship of Admiral Schley, at battle of Santiago, 1898.



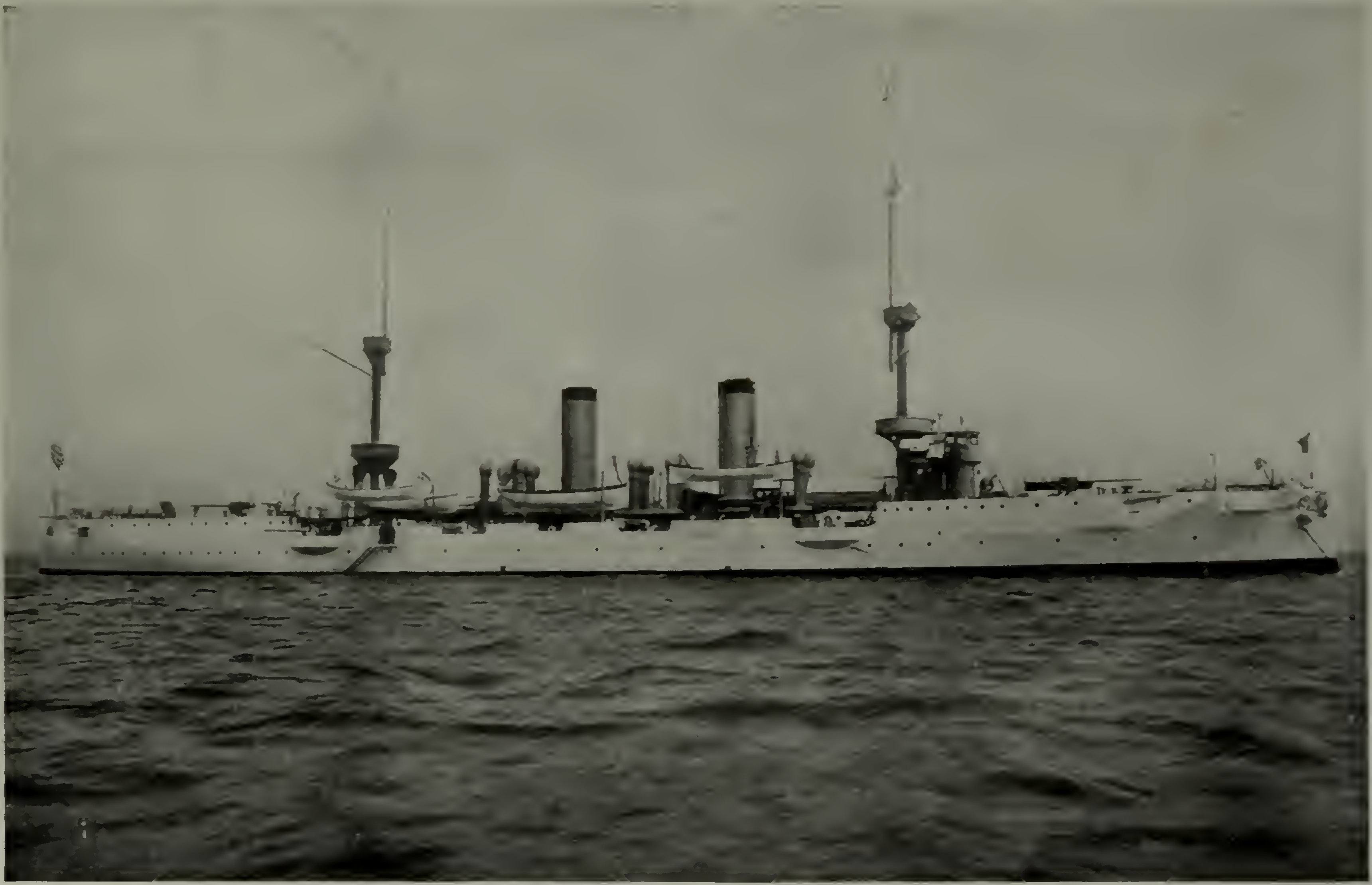
TOPEKA (Cruiser)

Displacement, 2,375 tons. Length, 250 feet. Beam, 35 feet. Draft, 15 feet 6 inches. Engines, 2 horizontal compound; boilers, 4 Scotch. Horsepower, 2,000. Speed (estimated), 16 knots. Armament, six 4-inch, under 4-inch nine. Complement, 20 officers, 300 men. Built at Kiel, Germany, 1881; purchased by U. S. in 1898. Assigned to Portsmouth, N. H., Navy Yard as Prison Ship, 1911. Photograph taken, 1898.



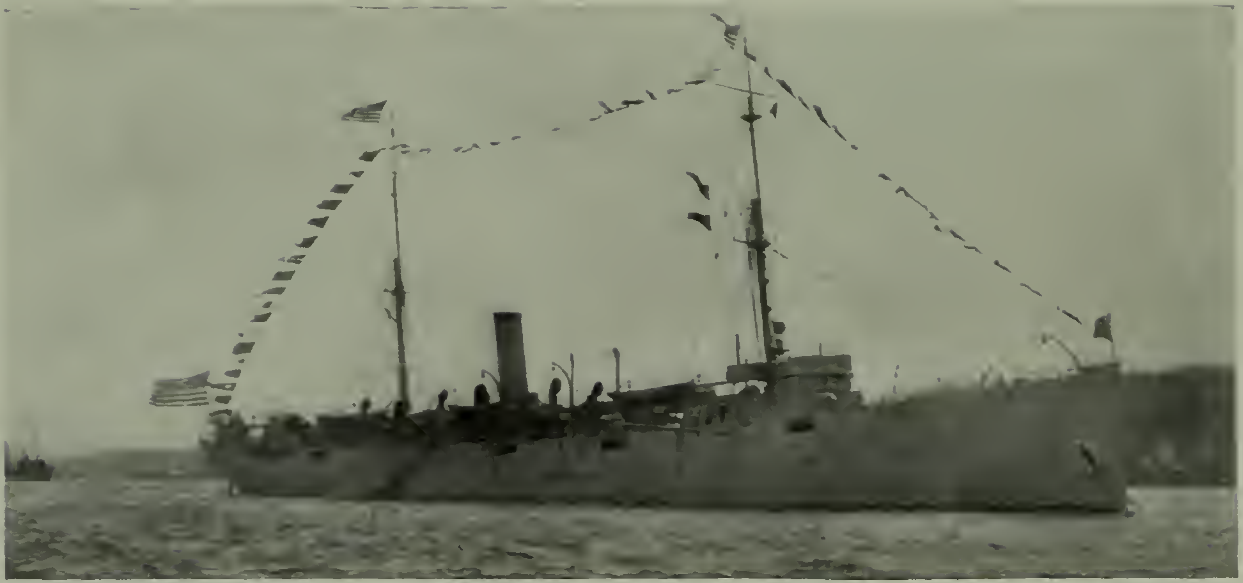
NEW ORLEANS (Protected Cruiser)

Displacement, 3,430 tons. Length, 346 feet. Beam, 43 feet 9 inches. Draft, 16 feet 10 inches. Engines, 2 vertical triple expansion; boilers, 4 Scotch, 1 auxiliary. Horsepower, 7,500. Speed, 20 knots (estimated). Armament, ten 5-inch, under 4-inch fifteen. Complement, 18 officers, 325 men. Built at Newcastle-on-Tyne, England, 1898, and purchased by United States same year. Same class, Albany.



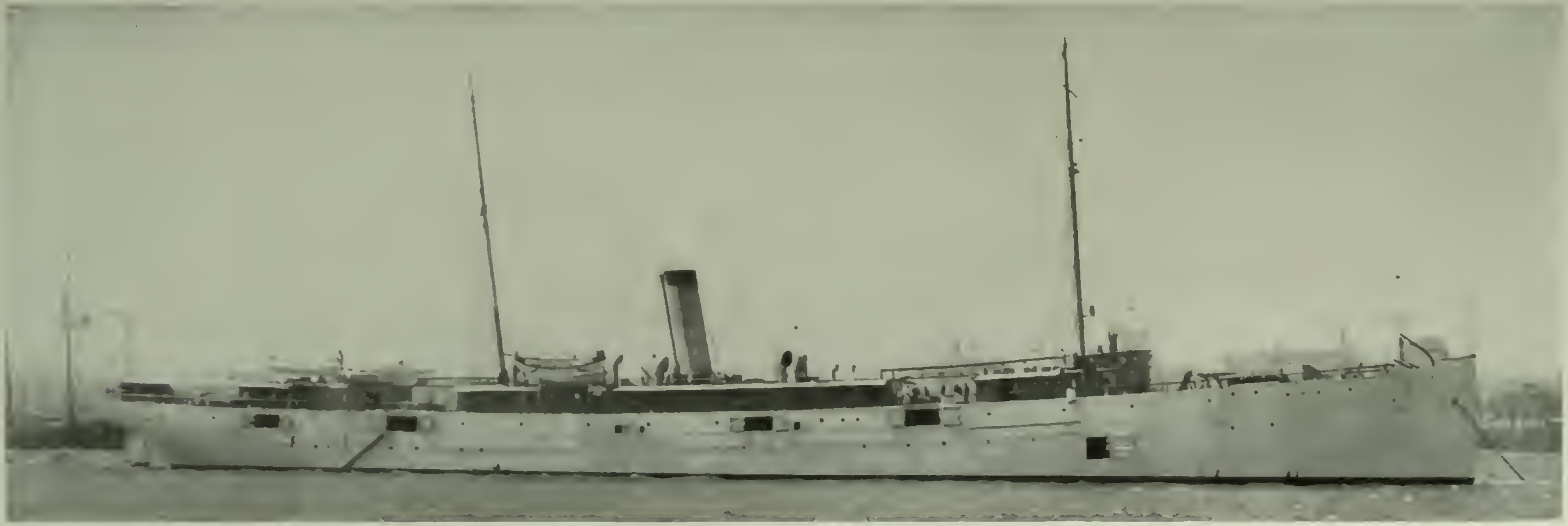
ALBANY (Protected Cruiser)

Displacement, 3,430 tons. Length, 346 feet. Beam, 43 feet 9 inches. Draft, 16 feet 10 inches. Engines, 2 vertical triple expansion; boilers, 4 Scotch. Horsepower, 7,400 (estimated). Speed at trial, 20.52 knots. Armament, ten 5-inch, under 4-inch eight. Complement, 18 officers, 328 men. Built at Newcastle-on-Tyne, England, 1900. Same class, New Orleans.



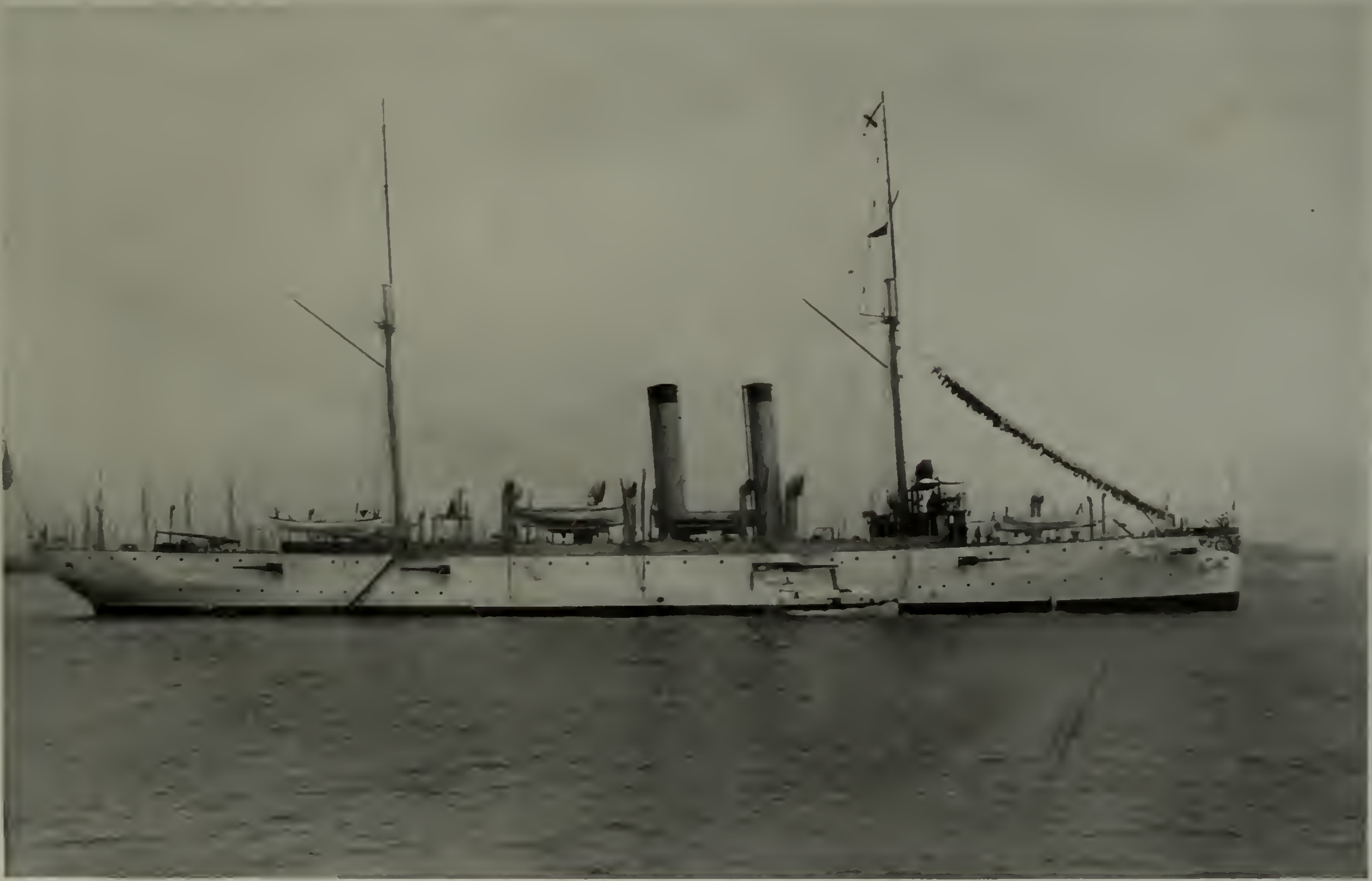
DIXIE (Auxiliary Cruiser)

Displacement, 6,114 tons. Length, 391 feet 6 inches. Beam, 48 feet 3 inches. Draft, 19 feet 11 inches. Horsepower, 3,800. Speed, 14.5 knots (estimated). Armament, under 4-inch twelve. Complement, 21 officers, 203 men. Built by Newport News Shipbuilding and Dry Dock Co., Newport News, Va., 1893. Photograph taken, 1911. Was formerly the steamship El Rio.



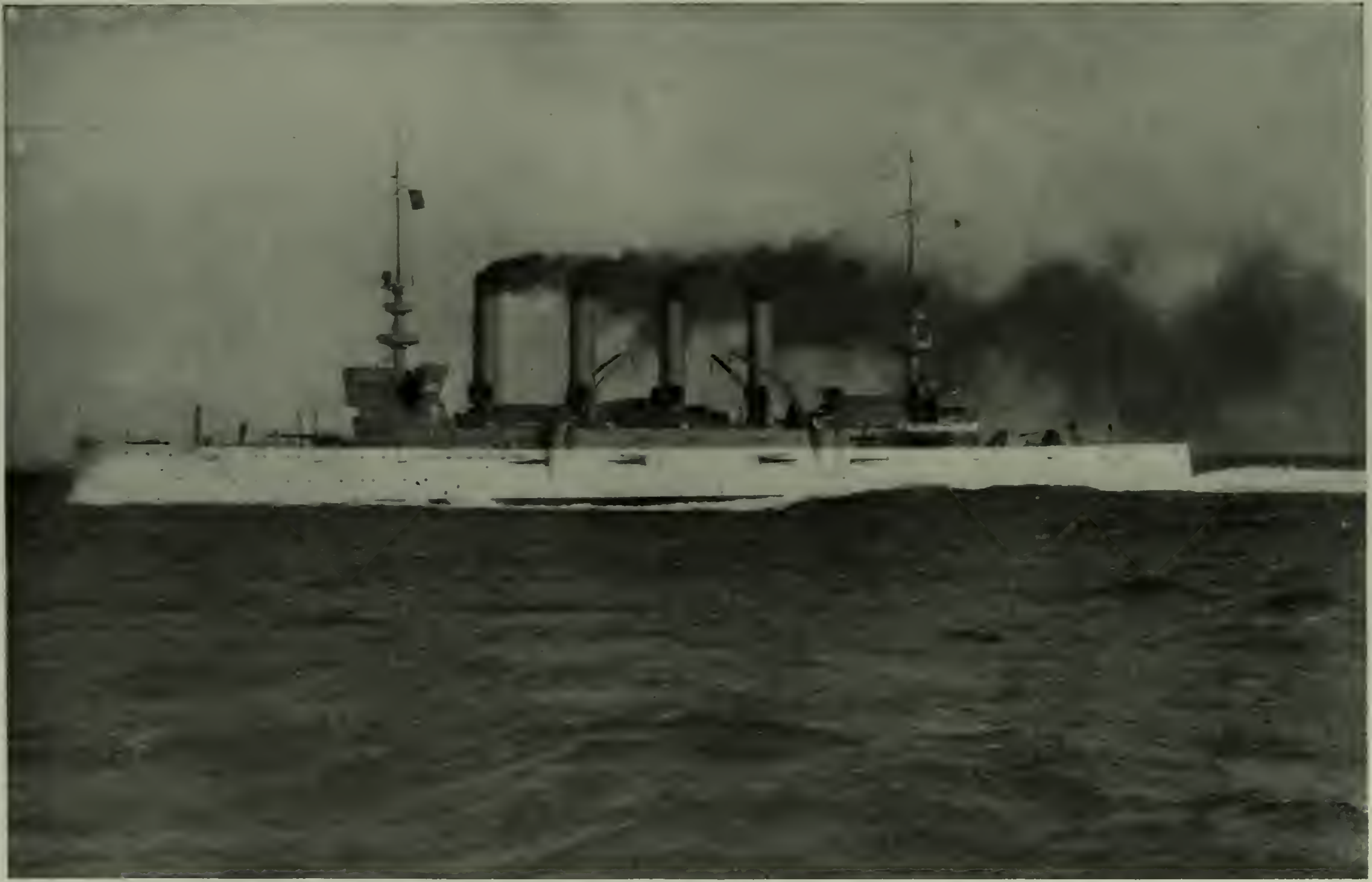
PRAIRIE (Auxiliary Cruiser)

Displacement, 6,620 tons. Length, 391 feet 6 inches. Beam, 48 feet 3 inches. Draft, 20 feet 9 inches. Horsepower, 3,800. Speed, 14.5 knots (estimated). Armament, under 4-inch twelve. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1890. Complement, 18 officers, 268 men. Was formerly the steamship El. Sol. Photograph taken, 1899.



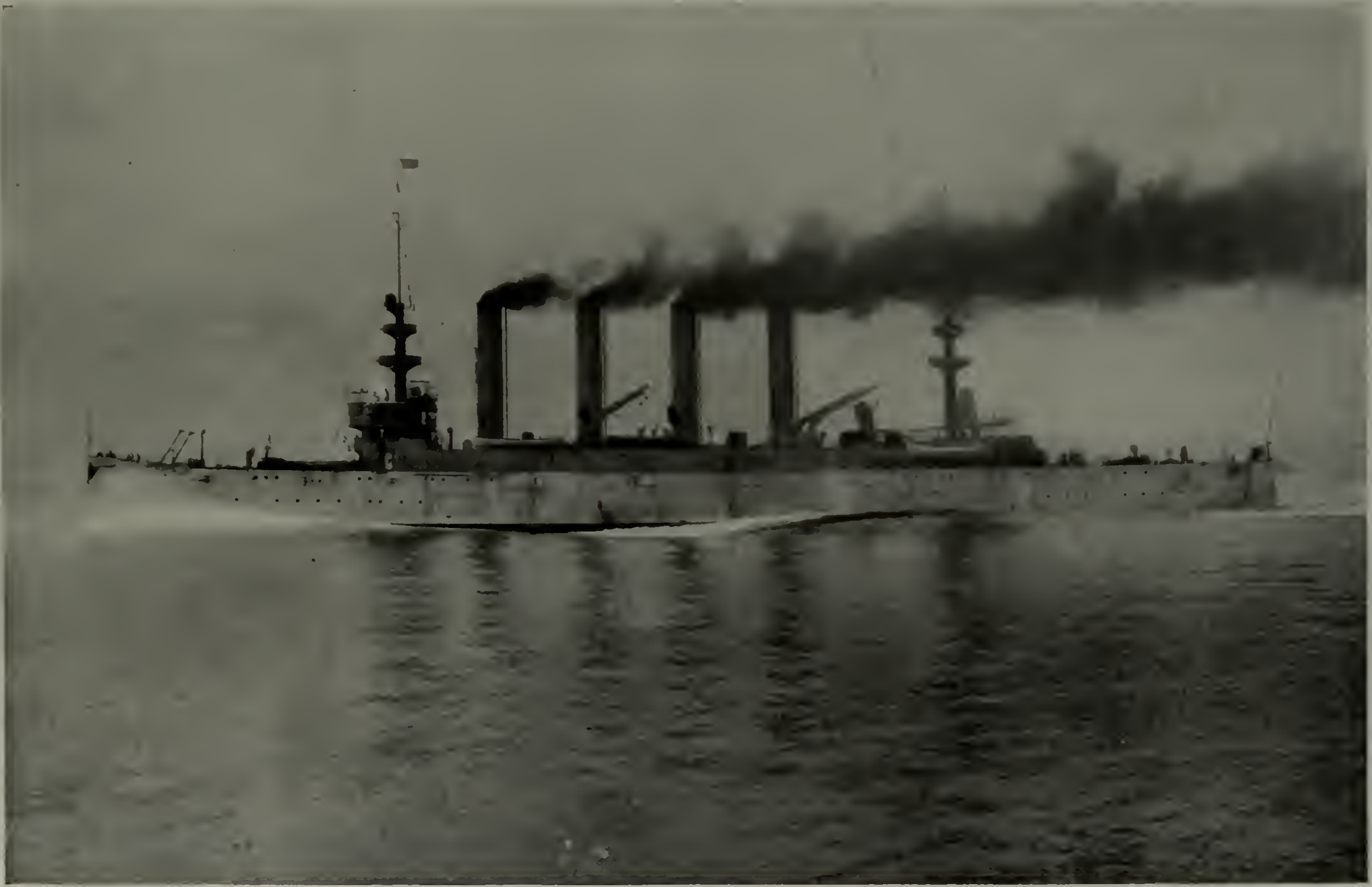
DES MOINES (Protected Cruiser)

Displacement, 3,200 tons. Length, 292 feet. Beam, 44 feet. Draft, 15 feet 9 inches. Engines, 2 vertical triple expansion; boilers, 6 Babcock & Wilcox. Horsepower, 5,340. Speed at trial (mean), 16.65 knots. Armament, ten 5-inch, under 4-inch eight. Complement, 18 officers, 279 men. Built by the Fore River Shipbuilding Co., Quincy, Mass., 1904. Photograph taken, 1904. Same class, Chattanooga, Cleveland, Denver, Galveston, Tacoma.



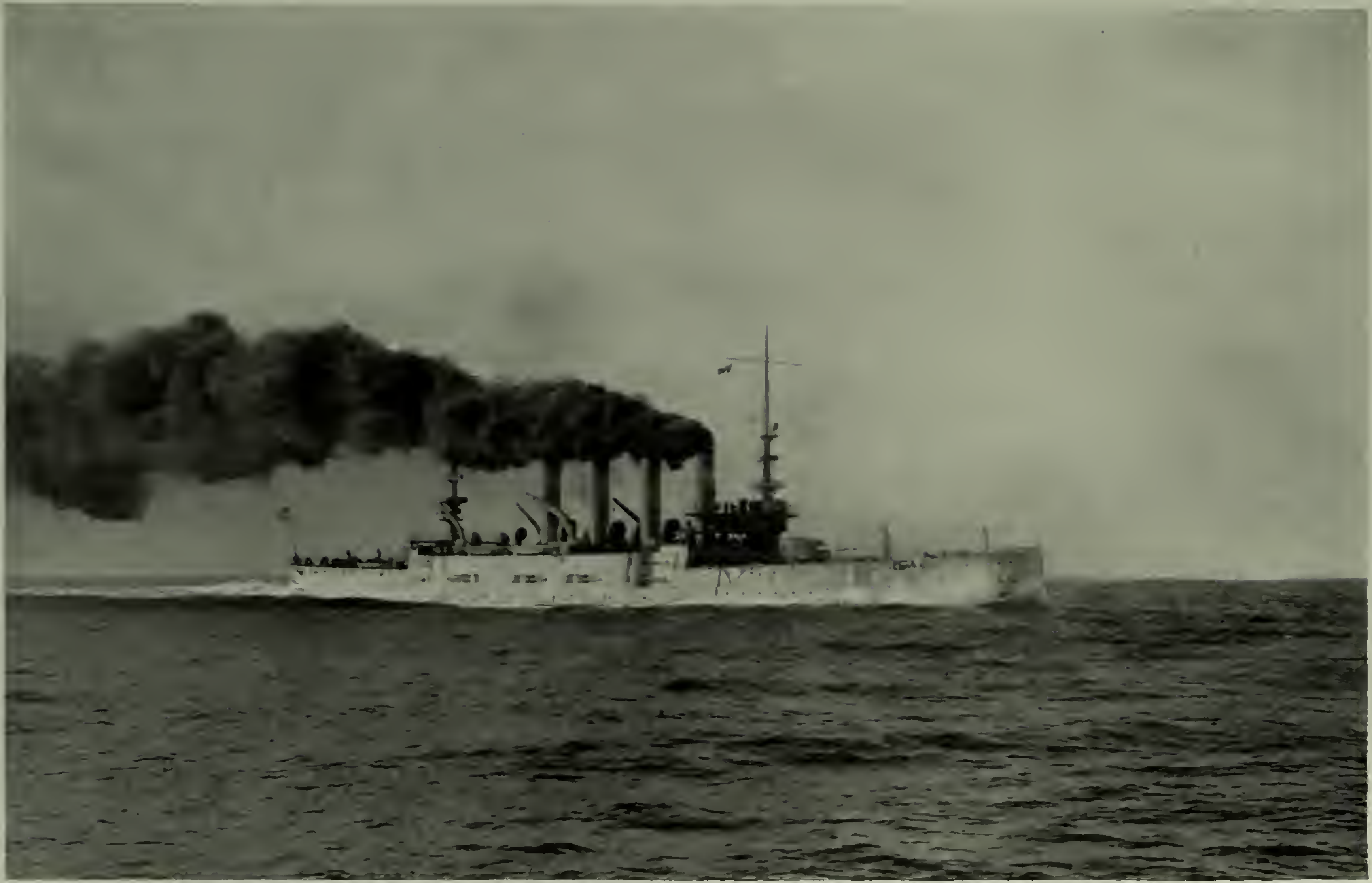
CHARLESTON (Protected Cruiser)

Displacement, 9,700 tons. Length, 424 feet. Beam, 66 feet. Draft, 22 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 27,200. Speed on trial (mean), 22.04 knots. Armament, fourteen 6-inch, under 4-inch twenty-two. Complement, 29 officers, 650 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1905. Photograph taken, 1906. Same class, St. Louis, Milwaukee.



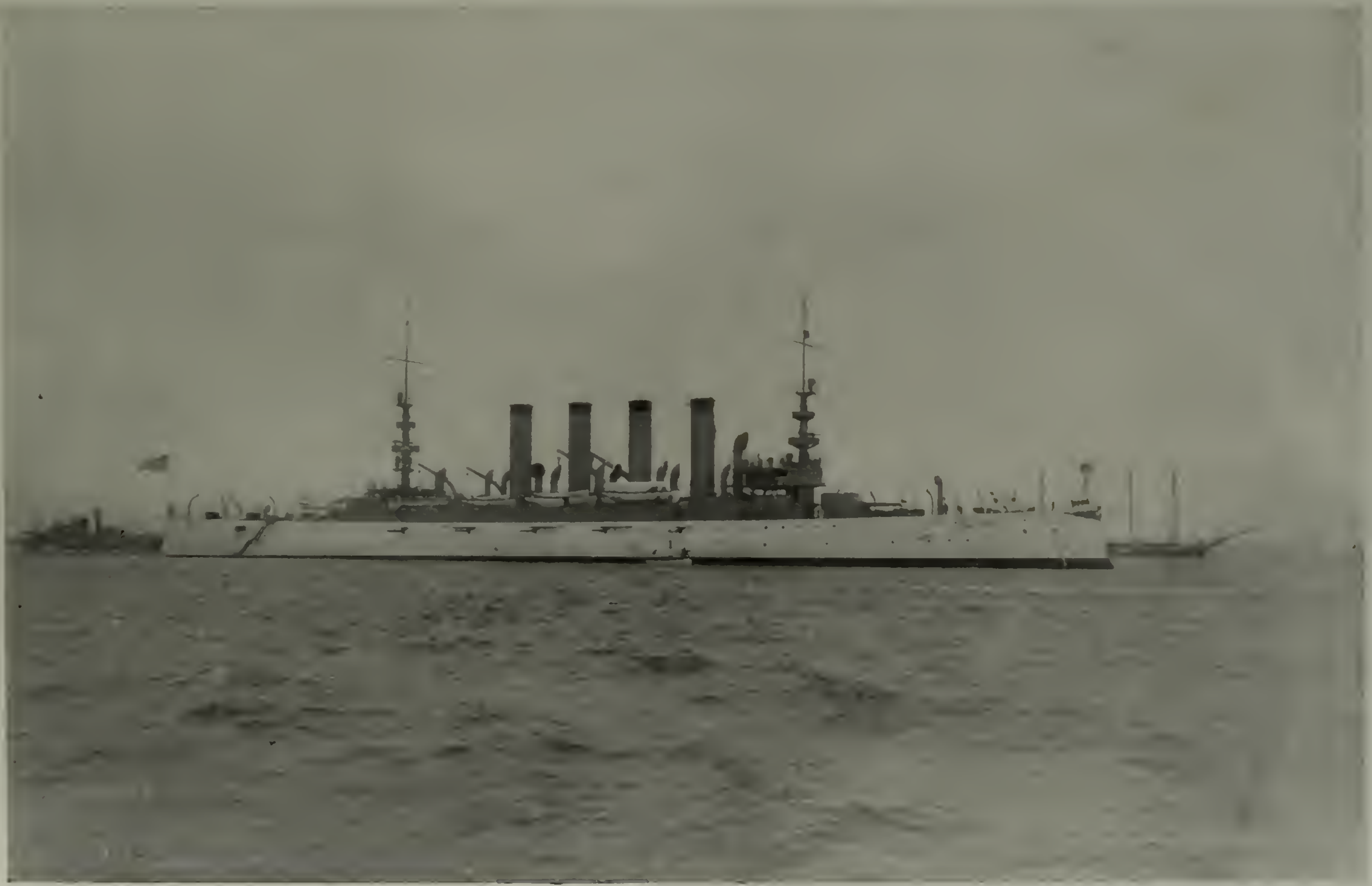
ST. LOUIS (Protected Cruiser)

Displacement, 9,700 tons. Length 424 feet. Beam, 66 feet. Draft, 22 feet 6 inches. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 27,264. Speed at trial (mean), 22.13 knots. Armament, fourteen 6-inch, under 4-inch twenty-two. Complement, 29 officers, 650 men. Built by Neafie & Levy, Philadelphia, Pa., 1906. Photograph taken on trial, 1906, at 22.25 knots.



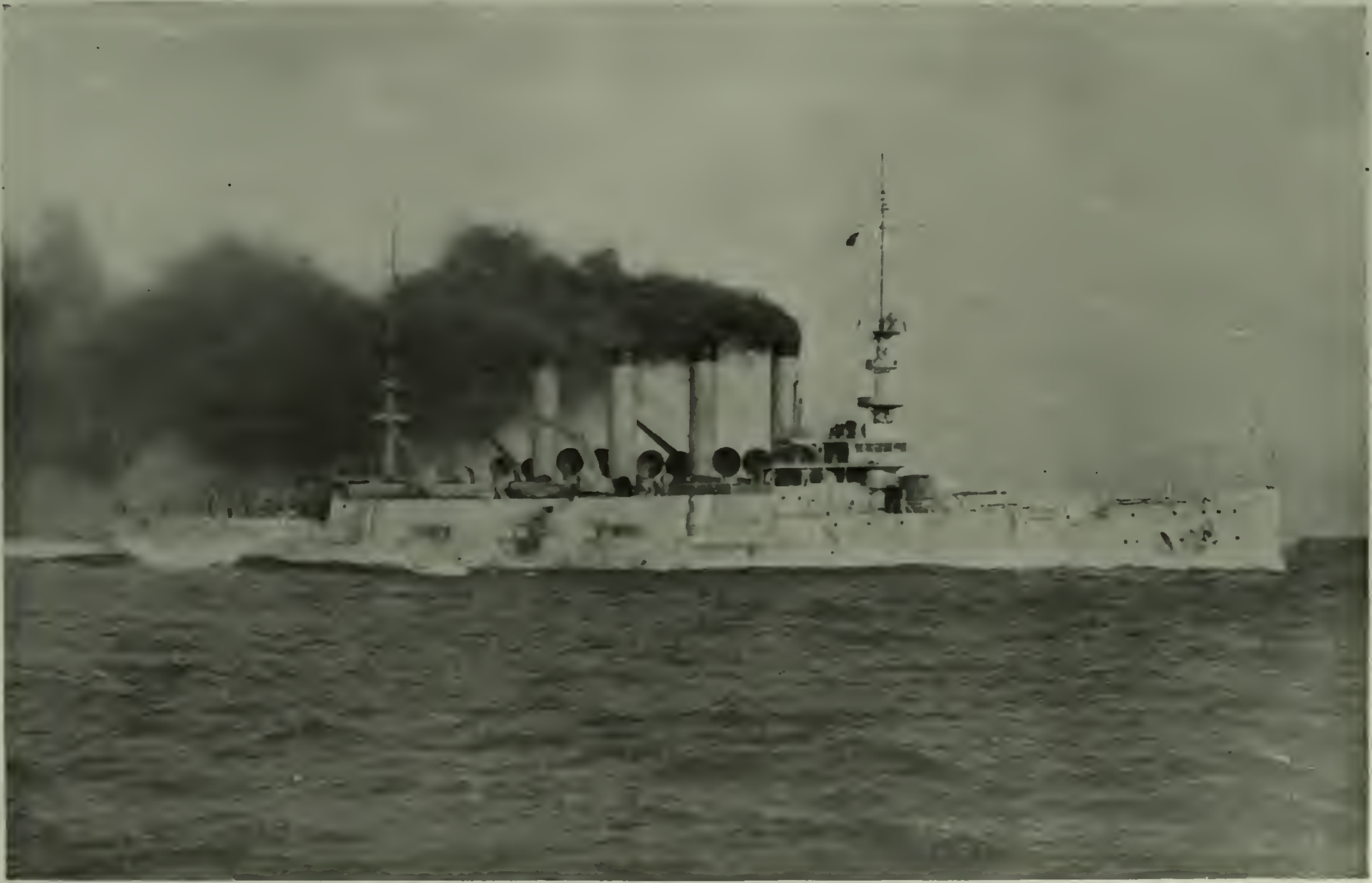
WEST VIRGINIA (Armored Cruiser)

Displacement, 13,680 tons. Length, 502 feet. Beam, 69 feet 6½ inches. Draft, 24 feet 1 inch. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 26,135. Speed on trial (mean), 22.15 knots. Armament, four 8-inch, fourteen 6-inch, under 4-inch twenty-two, and two 18-inch torpedo tubes. Complement, 44 officers and 866 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1905. Photograph taken on trial, 1904, at 22.15 knots. Same class, California, Colorado, Maryland, Pennsylvania, South Dakota. Has one cage mast, and one military mast, 1911.



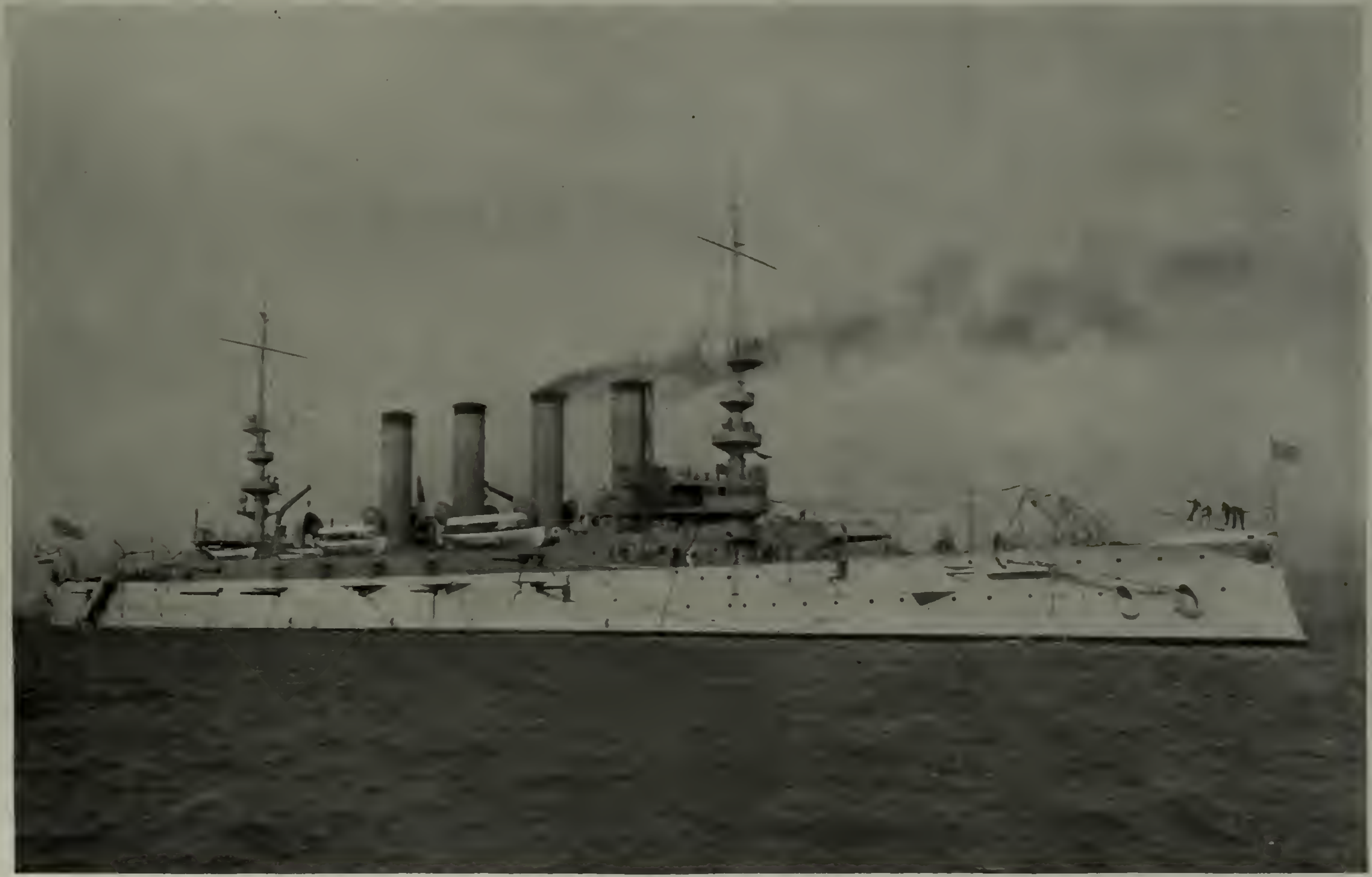
COLORADO (Armored Cruiser)

Displacement, 13,680 tons. Length, 502 feet. Beam, 69 feet 6½ inches. Draft, 24 feet 1 inch. Engines, 2 vertical triple expansion; boilers, 32 Niclausse. Horsepower, 26,837. Speed on trial (mean), 22.24 knots. Armament, four 8-inch, fourteen 6-inch, under 4-inch twenty-two, and two 18-inch torpedo tubes. Complement, 41 officers and 837 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1905. Photograph taken, 1905. Has one cage mast, and one military mast, 1911.



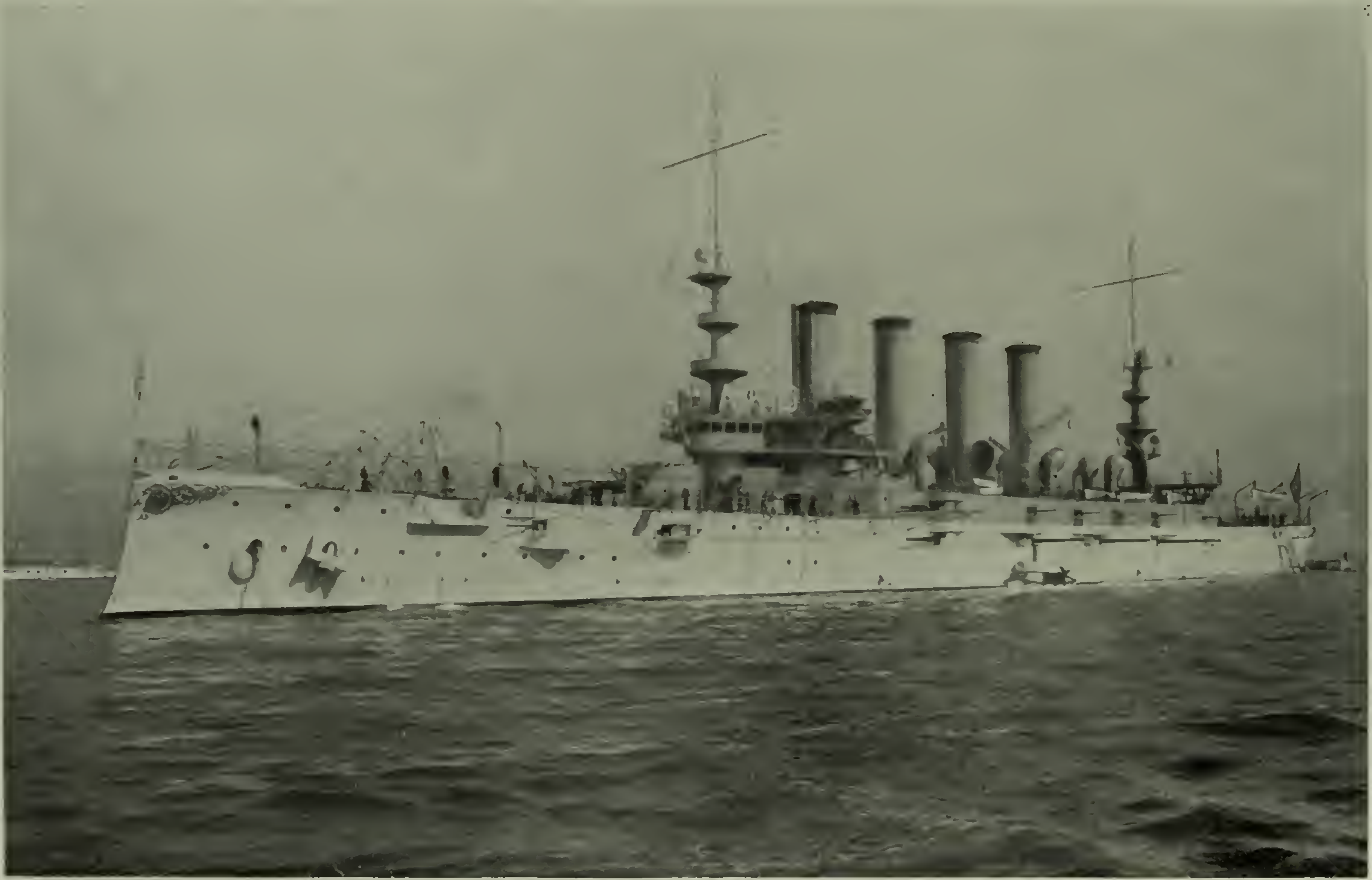
MARYLAND (Armored Cruiser)

Displacement, 13,680 tons. Length, 502 feet. Beam, 69 feet 6½ inches. Draft, 24 feet 1 inch. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 28,059. Speed on trial (mean), 22.41 knots. Armament, four 8-inch, fourteen 6-inch, under 4-inch twenty-two, and two 18-inch torpedo tubes. Complement, 41 officers and 837 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1905. Photograph taken on trial, 1905, at 22.41 knots. Has one cage mast, and one military mast, 1911.



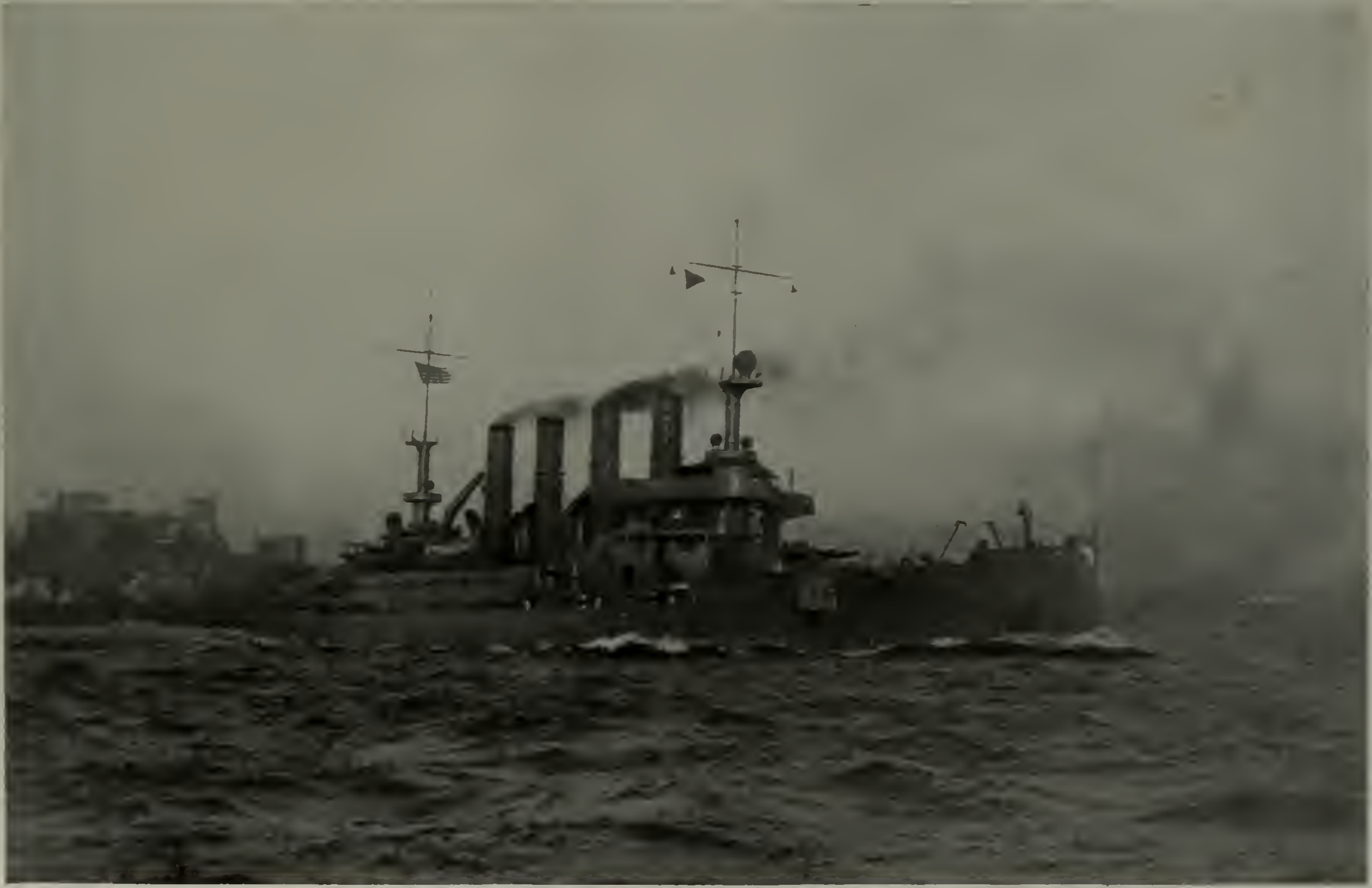
CALIFORNIA (Armored Cruiser)

Displacement, 13,680 tons. Length, 502 feet. Beam, 69 feet 6½ inches. Draft, 24 feet 1 inch. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 29,381. Speed on trial (mean), 22.20 knots. Armament, four 8-inch, fourteen 6-inch, under 4-inch twenty-two, and two 18-inch torpedo tubes. Complement, 41 officers, 837 men. Built by Union Iron Works, San Francisco, Cal., 1907. Has one cage mast, and one military mast, 1911.



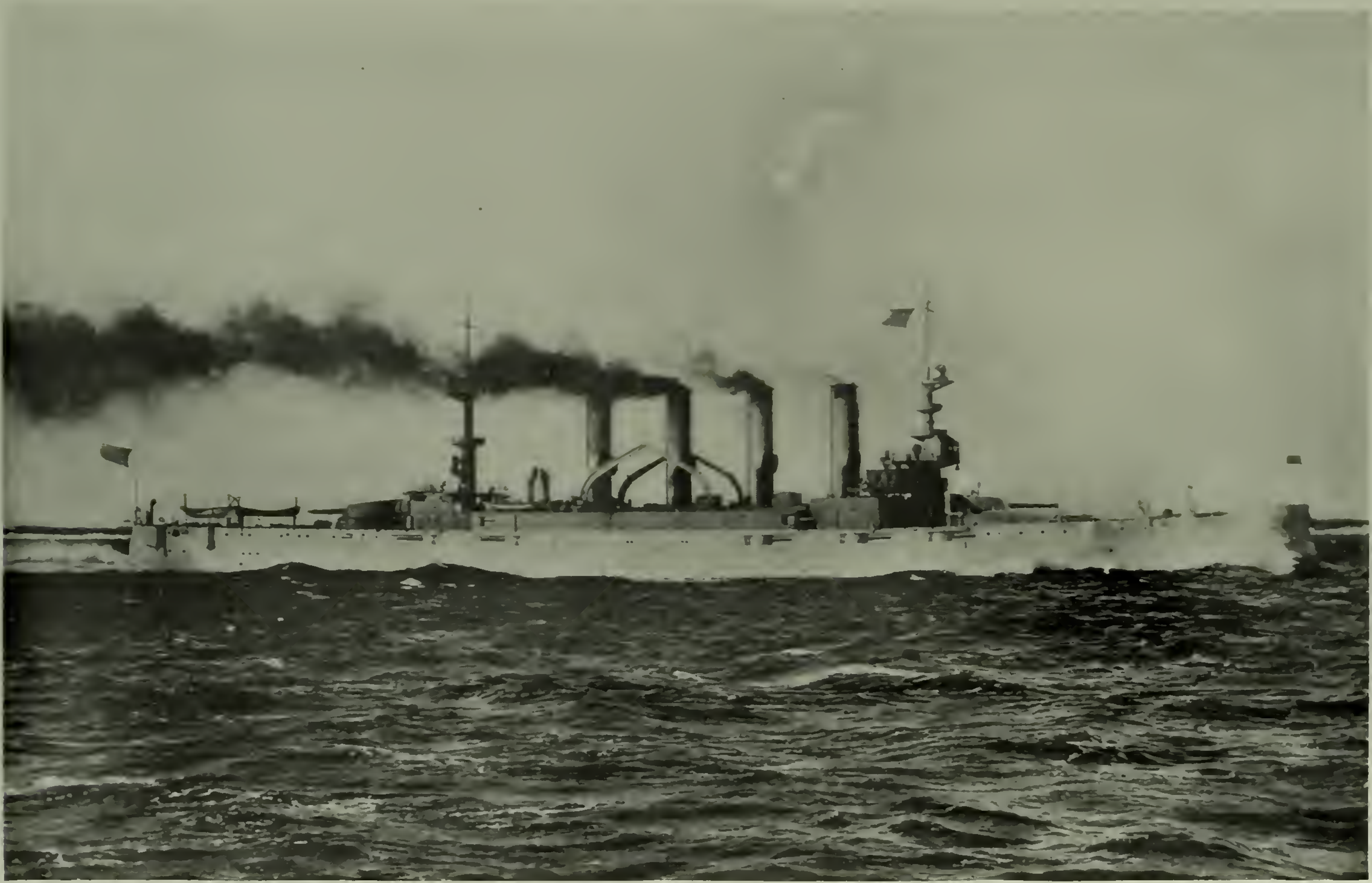
SOUTH DAKOTA (Armored Cruiser)

Displacement, 13,680 tons. Length, 502 feet. Beam, 69 feet 6½ inches. Draft, 24 feet 1 inch. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 28,543. Speed on trial (mean), 22.24 knots. Armament, four 8-inch, fourteen 6-inch, under 4-inch twenty-two, and two 18-inch torpedo tubes. Complement, 41 officers, 837 men. Built by Union Iron Works, San Francisco, Cal., 1907.



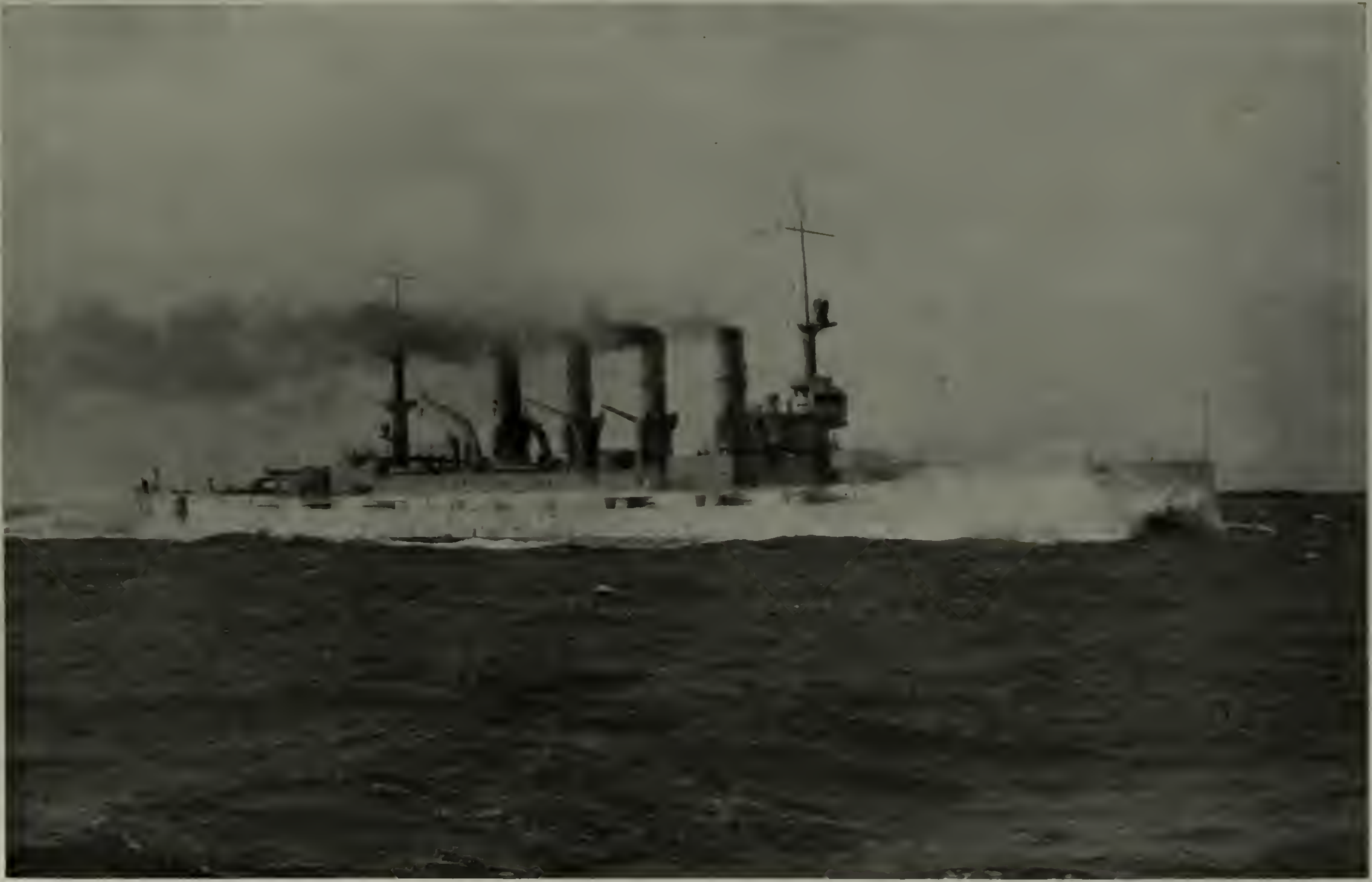
NORTH CAROLINA (Armored Cruiser)

Displacement, 14,500 tons. Length, 502 feet. Beam, 72 feet 10½ inches. Draft, 25 feet. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 29,785. Speed on trial (mean), 22.48 knots. Armament, four 10-inch, sixteen 6-inch, under 4-inch twenty-six, and four 21-inch torpedo tubes. Complement, 41 officers and 909 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1908. Photograph taken, 1911. Same class, Washington, Montana, Tennessee.



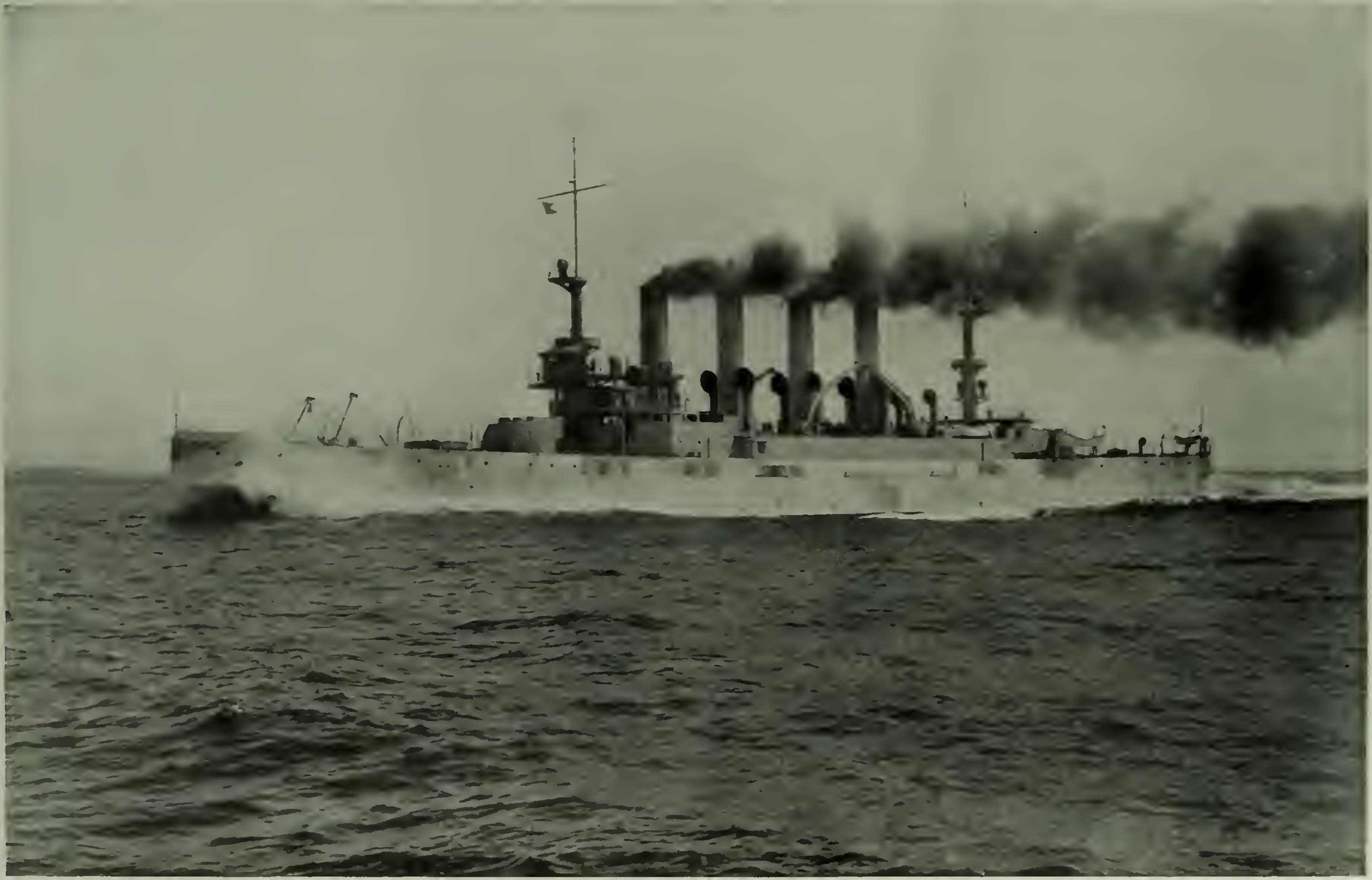
TENNESSEE (Armored Cruiser)

Displacement, 14,500 tons. Length, 502 feet. Beam, 72 feet 10½ inches. Draft, 25 feet. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 26,963. Speed on trial (mean), 22.16 knots. Armament, four 10-inch, sixteen 6-inch, under 4-inch twenty-six, and four 21-inch torpedo tubes. Complement, 44 officers and 930 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1907. Photograph taken on trial, 1906, at 22.16 knots (before completion).



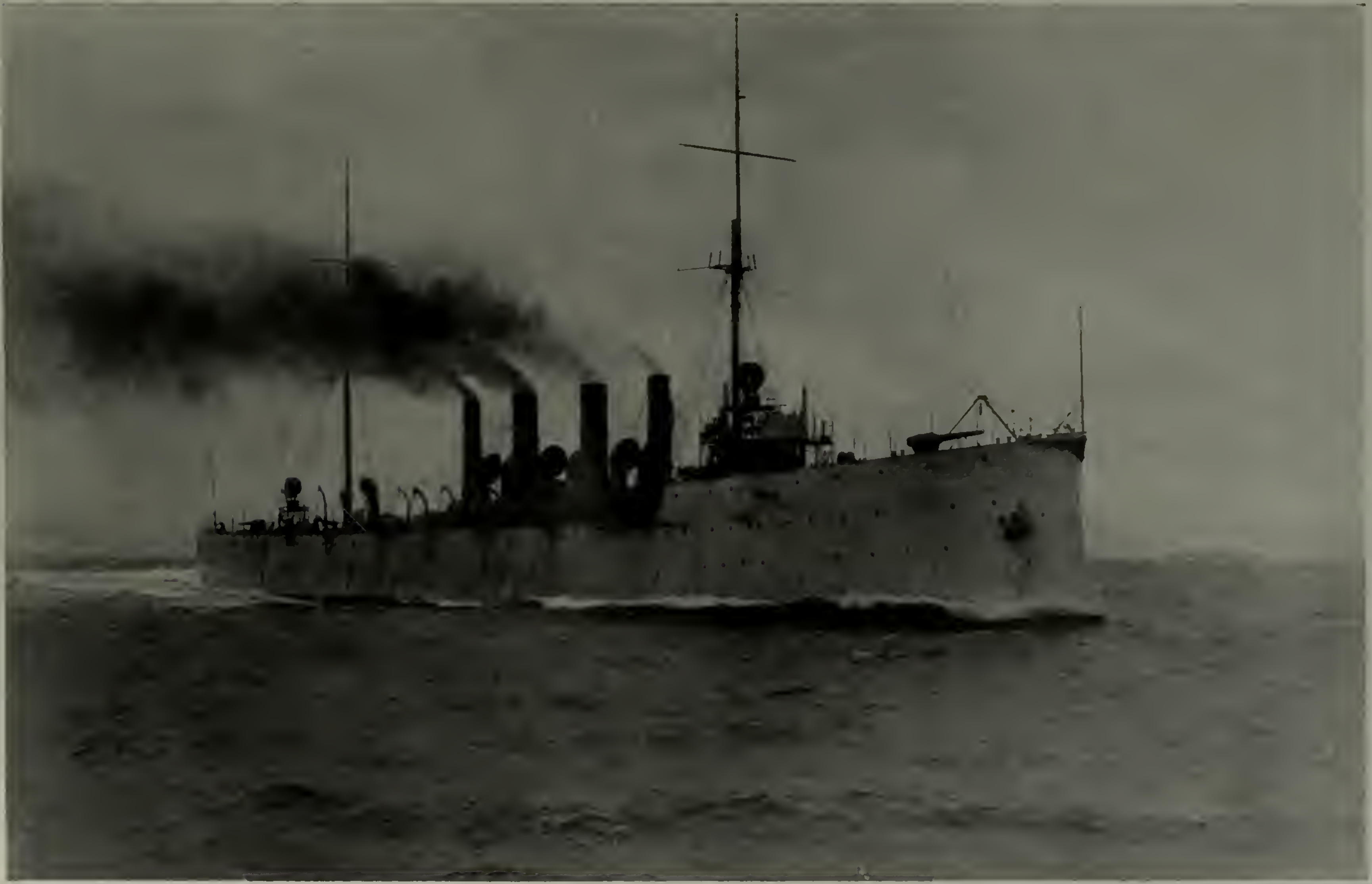
MONTANA (Armored Cruiser)

Displacement, 14,500 tons. Length, 502 feet. Beam, 72 feet 10½ inches. Draft, 25 feet. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 27,938. Speed on trial (mean), 22.26 knots. Armament, four 10-inch, sixteen 6-inch, under 4-inch twenty-six, and four 21-inch torpedo tubes. Complement, 41 officers and 909 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1908. Photograph taken on trial, 1908, at 21.961 knots.



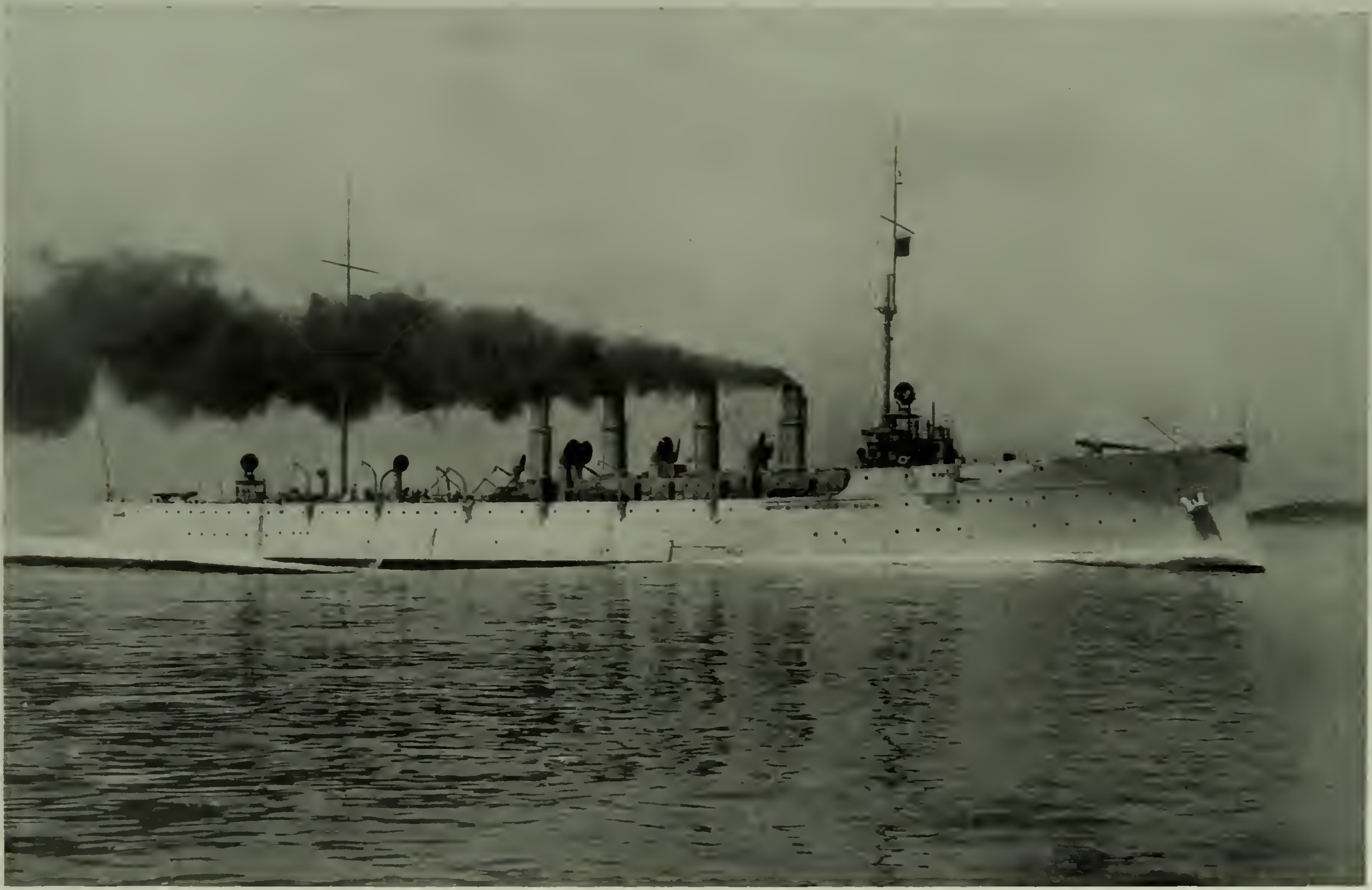
WASHINGTON (Armored Cruiser)

Displacement, 14,500 tons. Length, 502 feet. Beam, 72 feet 10½ inches. Draft, 25 feet. Engines, 2 vertical triple expansion; boilers, 16 Babcock & Wilcox. Horsepower, 27,152. Speed on trial (mean), 22.27 knots. Armament, four 10-inch, sixteen 6-inch, under 4-inch twenty-six, four 21-inch torpedo tubes. Complement, 41 officers and 909 men. Built by New York Shipbuilding Company, Camden, N. J., 1907. Photograph taken on trial, 1906, at 22.27 knots (before completion).



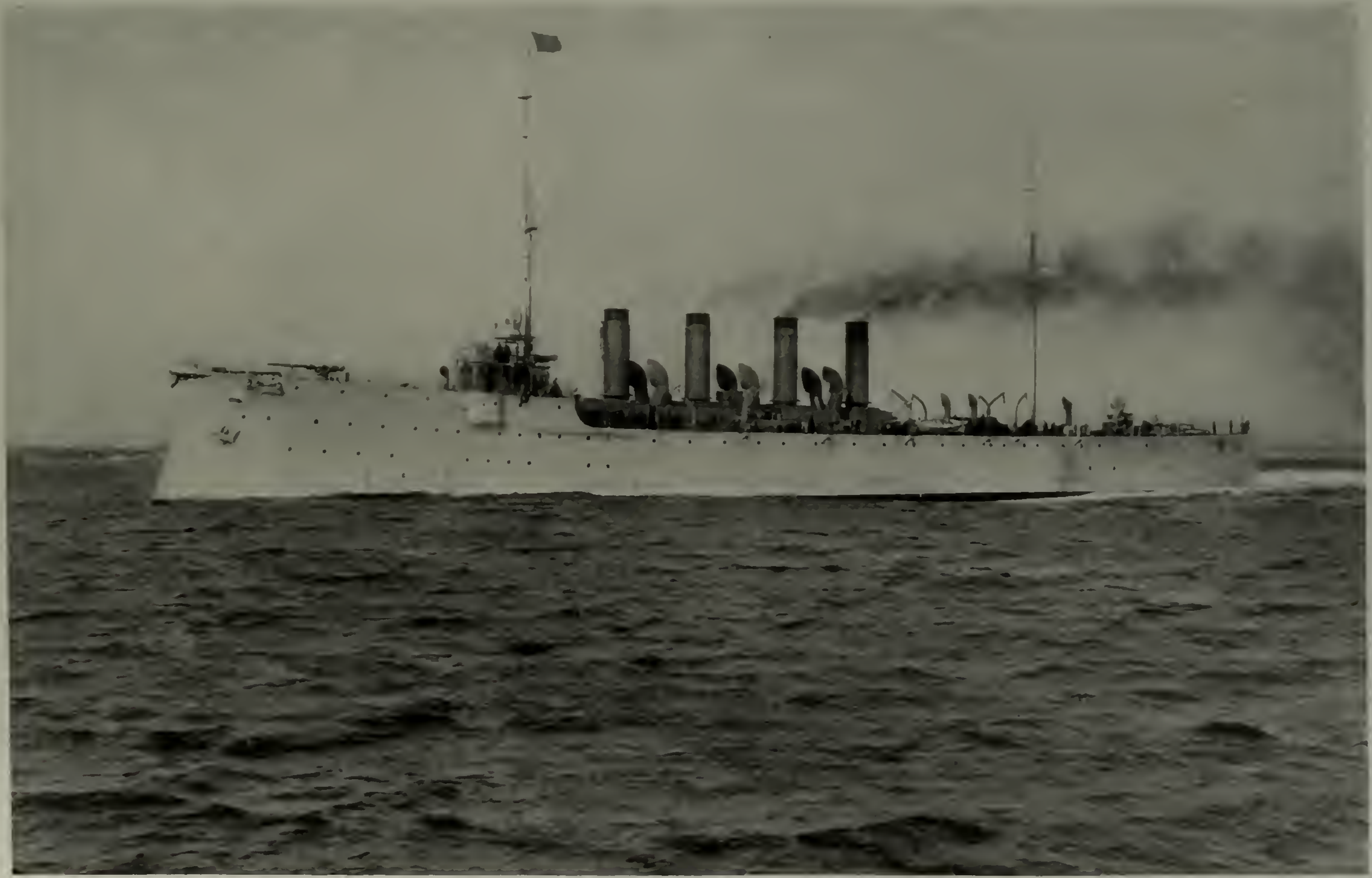
BIRMINGHAM (Scout Cruiser)

Displacement, 3,750 tons. Length, 420 feet. Beam, 47 feet 1 inch. Draft, 16 feet 9 inches. Engines, 2 vertical triple expansion; boilers, 12 Fore River. Horsepower, 1,5670. Speed at trial (mean), 24.33 knots. Armament, two 5-inch, under 4-inch eight, and two 21-inch torpedo tubes. Complement, 22 officers, 355 men. Built by Fore River Shipbuilding Co., Quincy, Mass., 1908. Photograph taken on trial, 1908, at 26.05 knots. Same class, Salem, Chester.



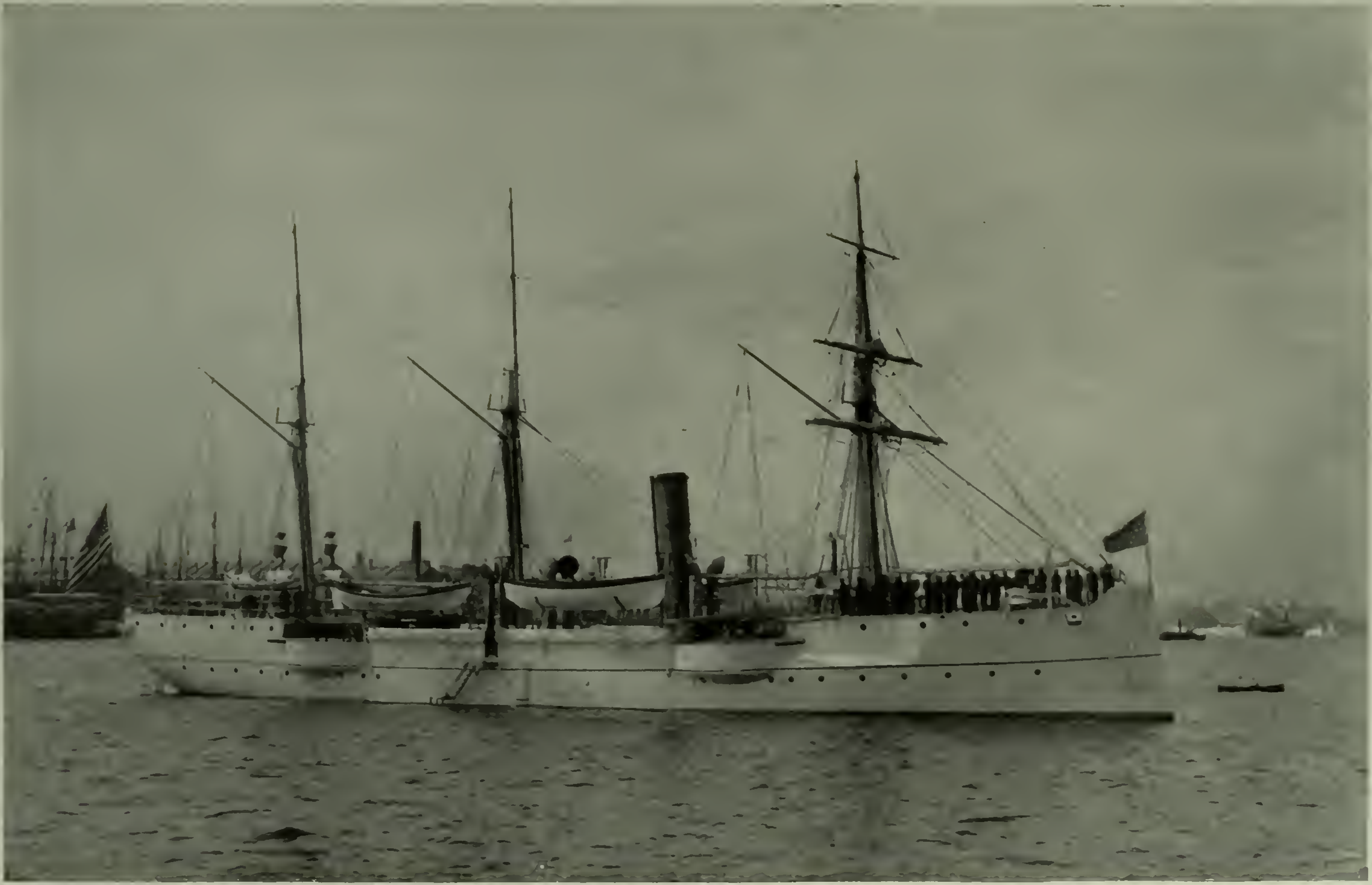
SALEM (Scout Cruiser)

Displacement, 3,750 tons. Length, 420 feet. Beam, 47 feet 1 inch. Draft, 16 feet 9 inches. Engines, 2 Curtis turbines. Boilers, 12 Fore River. Horsepower, 19,578. Speed on trial (mean), 25.95 knots. Armament, two 5-inch, under 4-inch eight, and two 21-inch torpedo tubes. Complement, 22 officers, 351 men. Built by Fore River Shipbuilding Co., Quincy, Mass., 1908. Photograph taken on trial, 1908, at 26.05 knots.



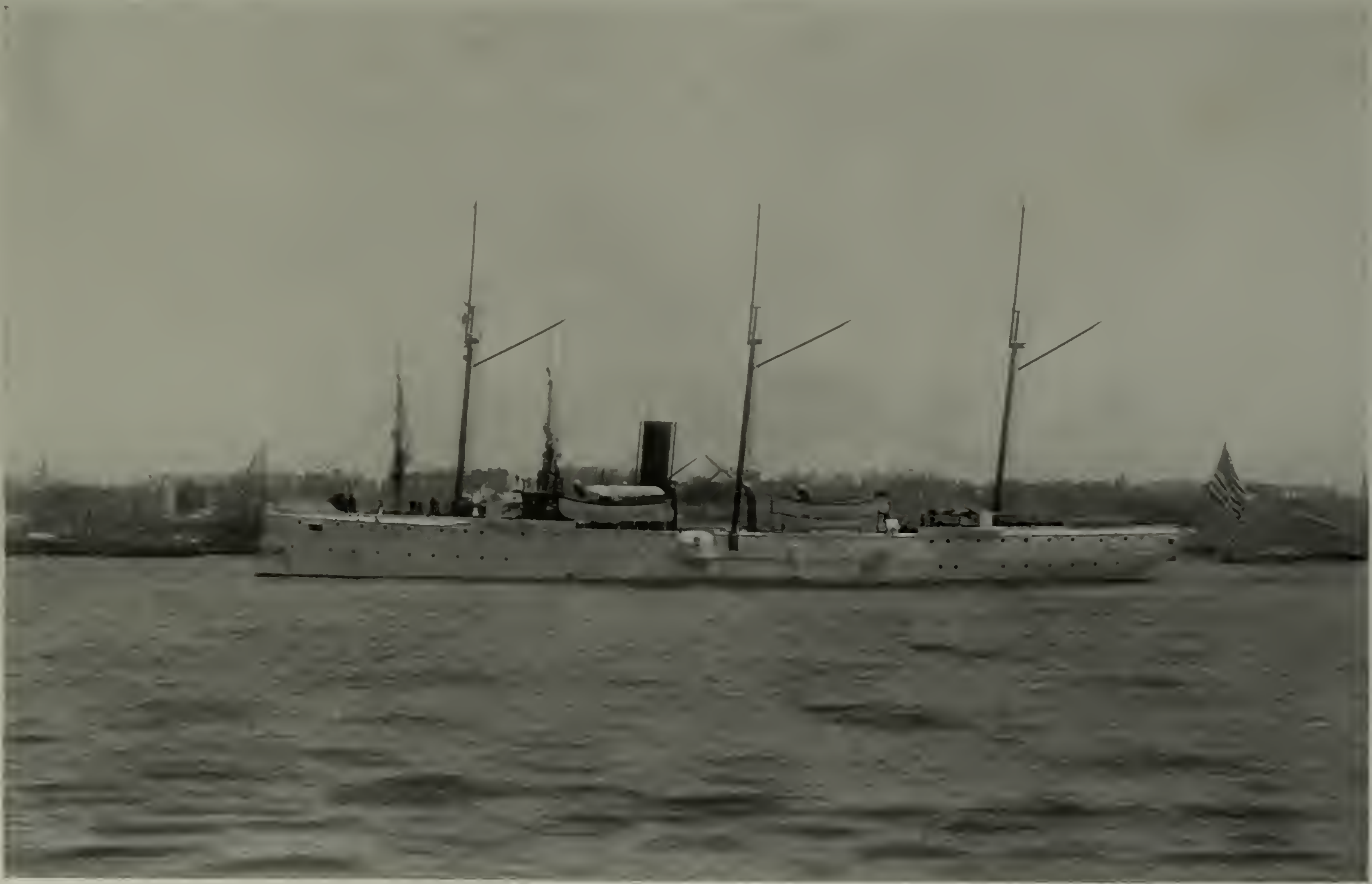
CHESTER (Scout Cruiser)

Displacement, 3,750 tons. Length, 420 feet. Beam, 47 feet 1 inch. Draft, 16 feet 9 inches. Engines, 4 Parsons turbines; boilers, 12 Normand. Horsepower, 23,900 (estimated). Speed at trial (mean), 26.52 knots. Armament, two 5-inch, under 4-inch eight and two 21-inch torpedo tubes. Complement, 22 officers, 351 men. Built by Bath Iron Works, Bath, Me., 1908. Photograph taken on trial, 1908, at 25.01 knots.



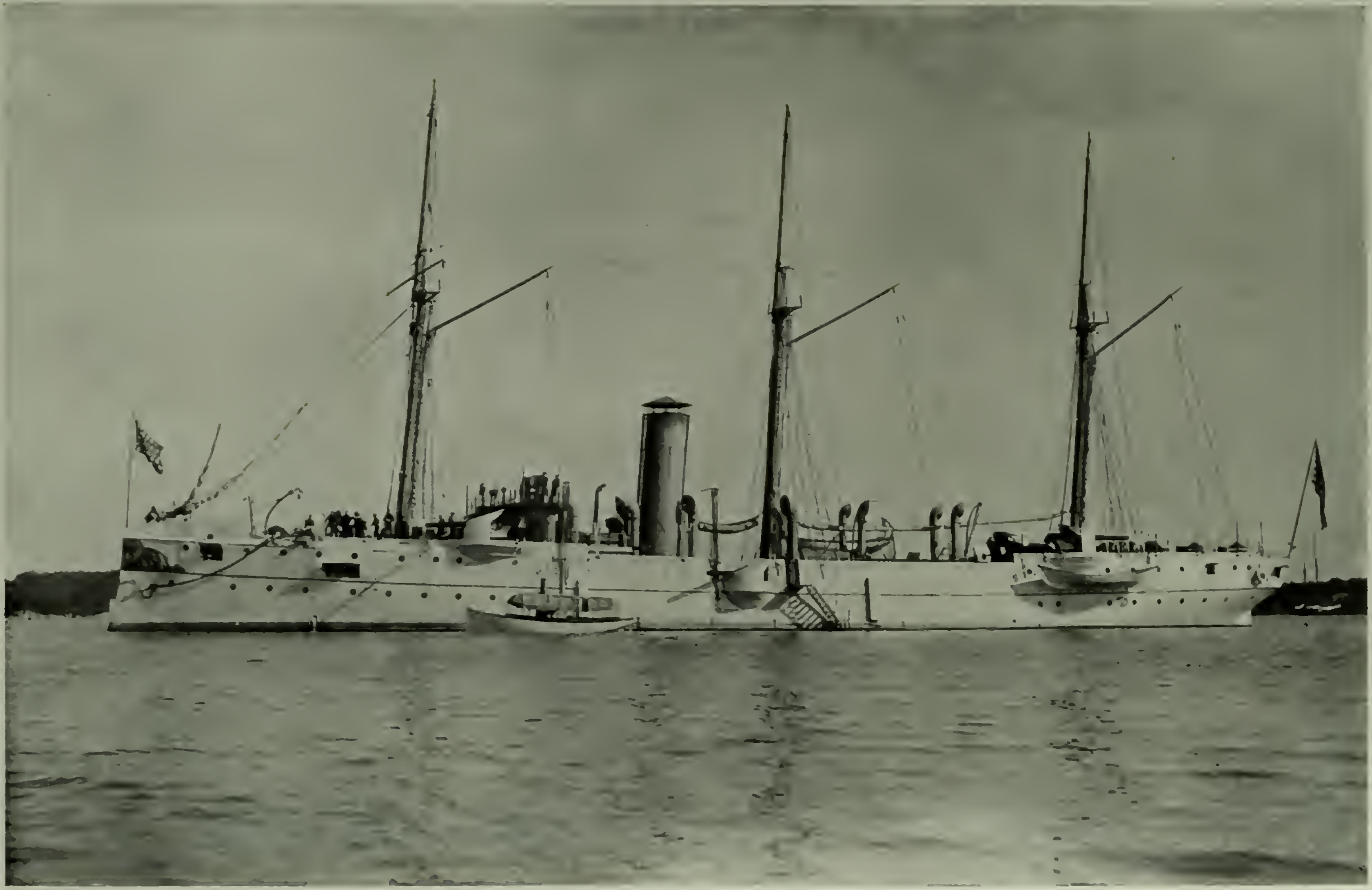
PETREL (Gunboat)

Displacement, 890 tons. Length, 181 feet 4 inches. Beam, 31 feet. Draft, 11 feet 6 inches. Horsepower, 1,000. Speed at trial (mean), 11.40 knots. Armament, four 6-inch, under 4-inch eight. Complement, 8 officers, 130 men. Built by Columbian Iron Works, Baltimore, Md., 1889. Photograph taken, 1890. At battle of Manila Bay, 1898. Carries 4-inch main battery at present.



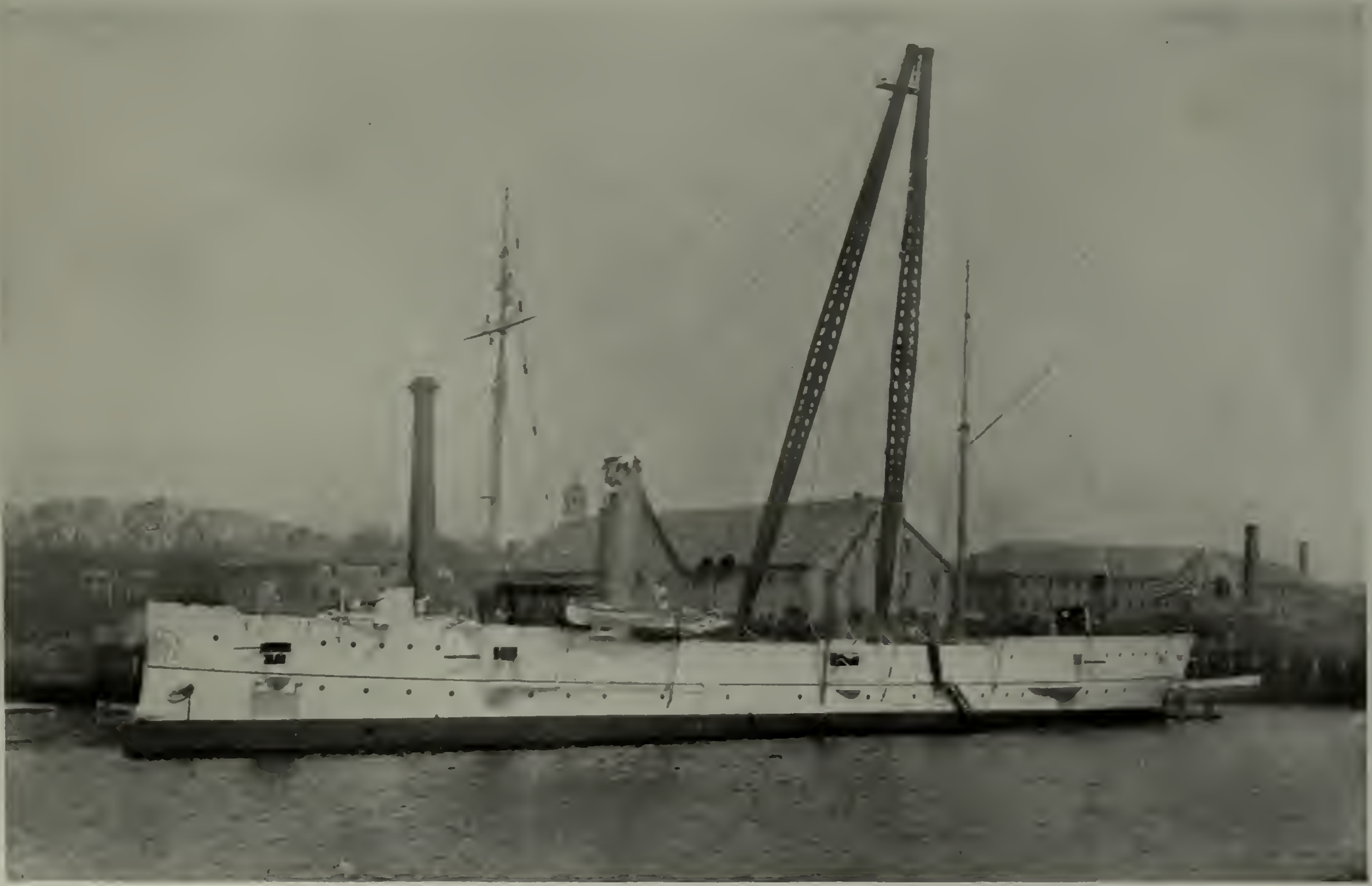
BENNINGTON (Gunboat)

Displacement, 1,710 tons. Length, 230 feet. Beam, 36 feet. Draft, 14 feet. Horsepower, 3,436. Speed at trial (mean), 17.50 knots. Armament, six 6-inch, under 4-inch ten. Complement, 14 officers, 181 men. Built by N. F. Palmer, Jr., & Co., Chester, Pa., 1891. Photograph taken, 1893. Same class, Concord and Yorktown.



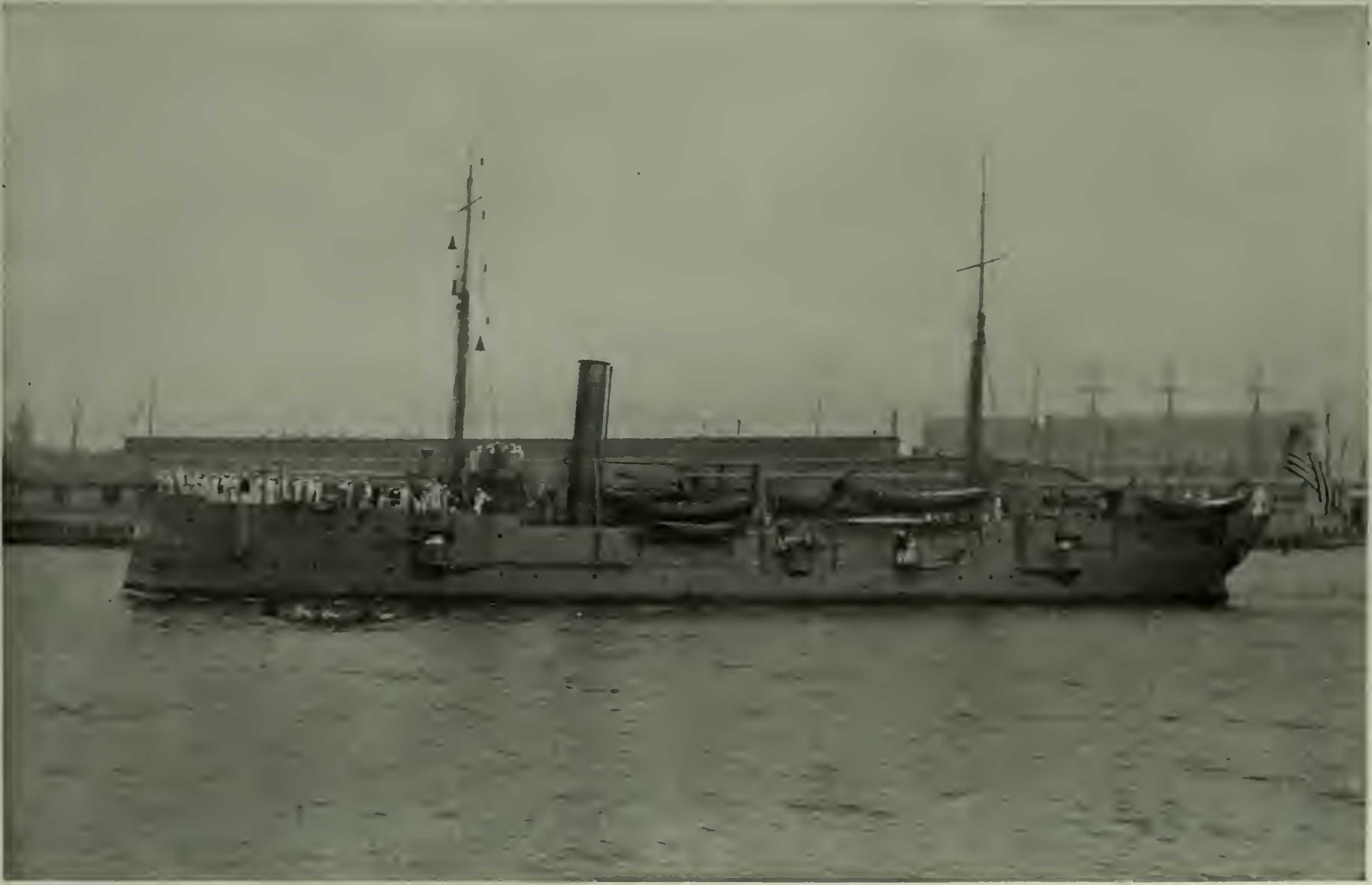
CONCORD (Gunboat)

Displacement, 1,710 tons. Length, 230 feet. Beam, 36 feet. Draft, 14 feet. Horsepower, 3,404. Speed at trial (mean), 16.8 knots. Armament, six 6-inch, under 4-inch ten. Complement, 14 officers, 181 men. Built by N. F. Palmer, Jr., & Co., Chester, Pa., 1891. Photograph taken, 1891. At battle of Manila Bay, 1898. Assigned to Washington Naval Militia, 1911.



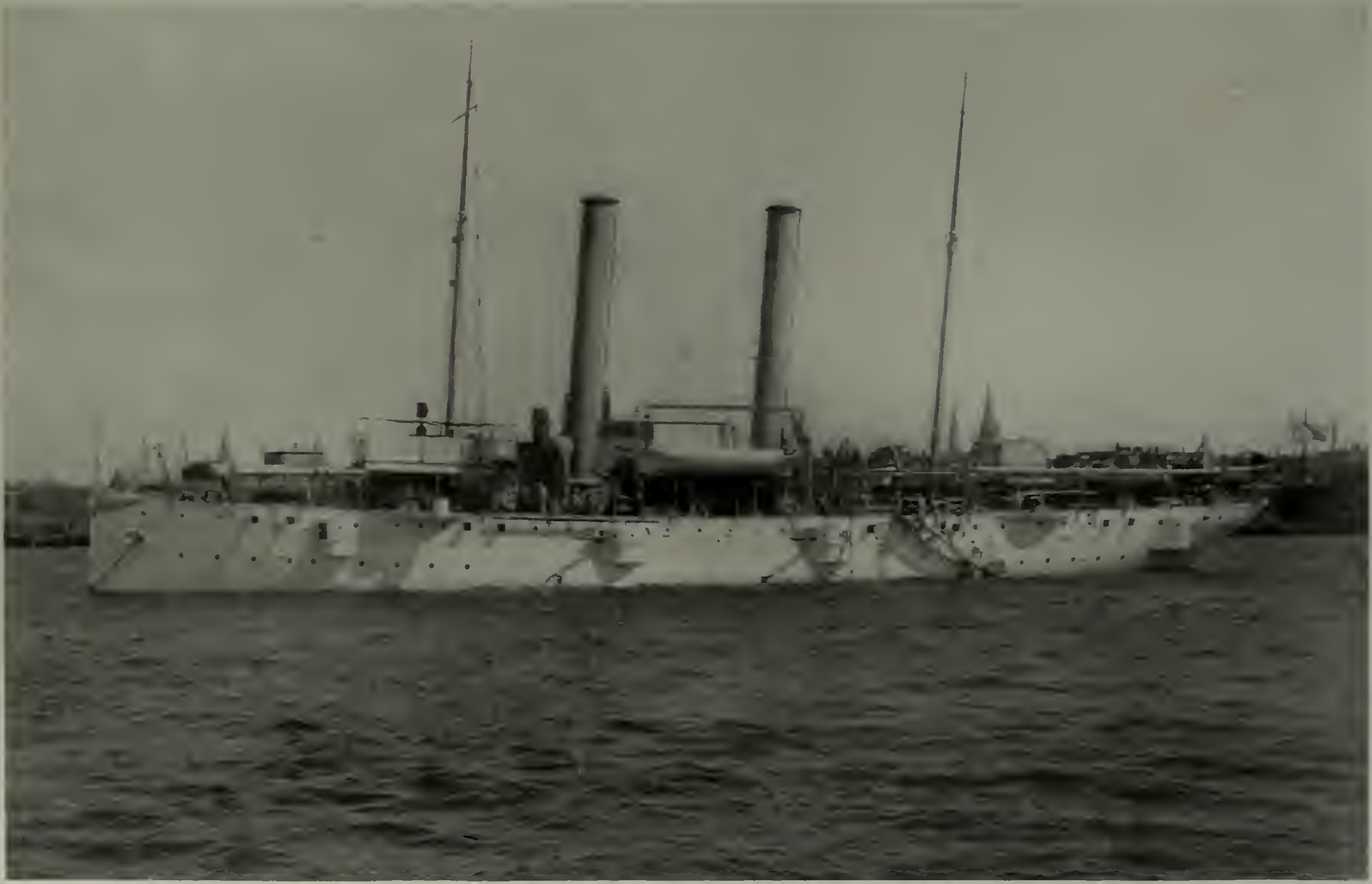
MACHIAS (Gunboat)

Displacement, 1,177 tons. Length, 204 feet. Beam, 32 feet 1½ inches. Draft, 12 feet. Horsepower, 1,848. Speed at trial (mean), 15.46 knots. Armament, eight 4-inch, under 4-inch four. Complement, 9 officers, 148 men. Built by Bath Iron Works, Bath, Me., 1892. Photograph taken, 1898. Same class, Castine. Assigned to Connecticut Naval Militia in 1907.



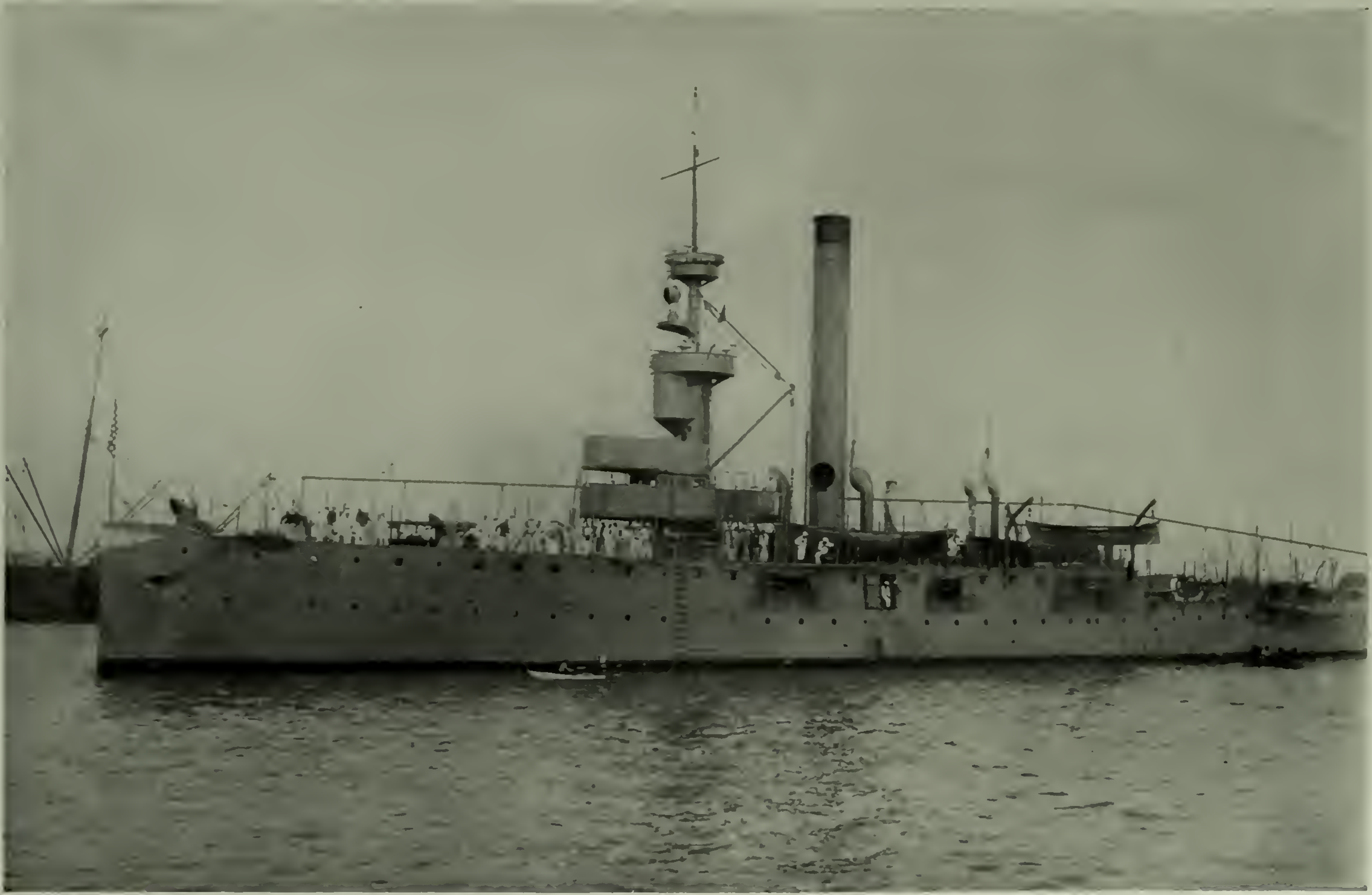
CASTINE (Gunboat)

Displacement, 1,177 tons. Length, 204 feet. Beam, 32 feet 1½ inches. Draft, 12 feet. Horsepower, 2,180. Speed at trial (mean), 16.03 knots. Armament, eight 4-inch, under 4-inch six. Complement, 10 officers, 140 men. Built by Bath Iron Works, Bath, Me., 1893. Photograph taken, 1898. Assigned, tender to submarines, 1911, battery removed.



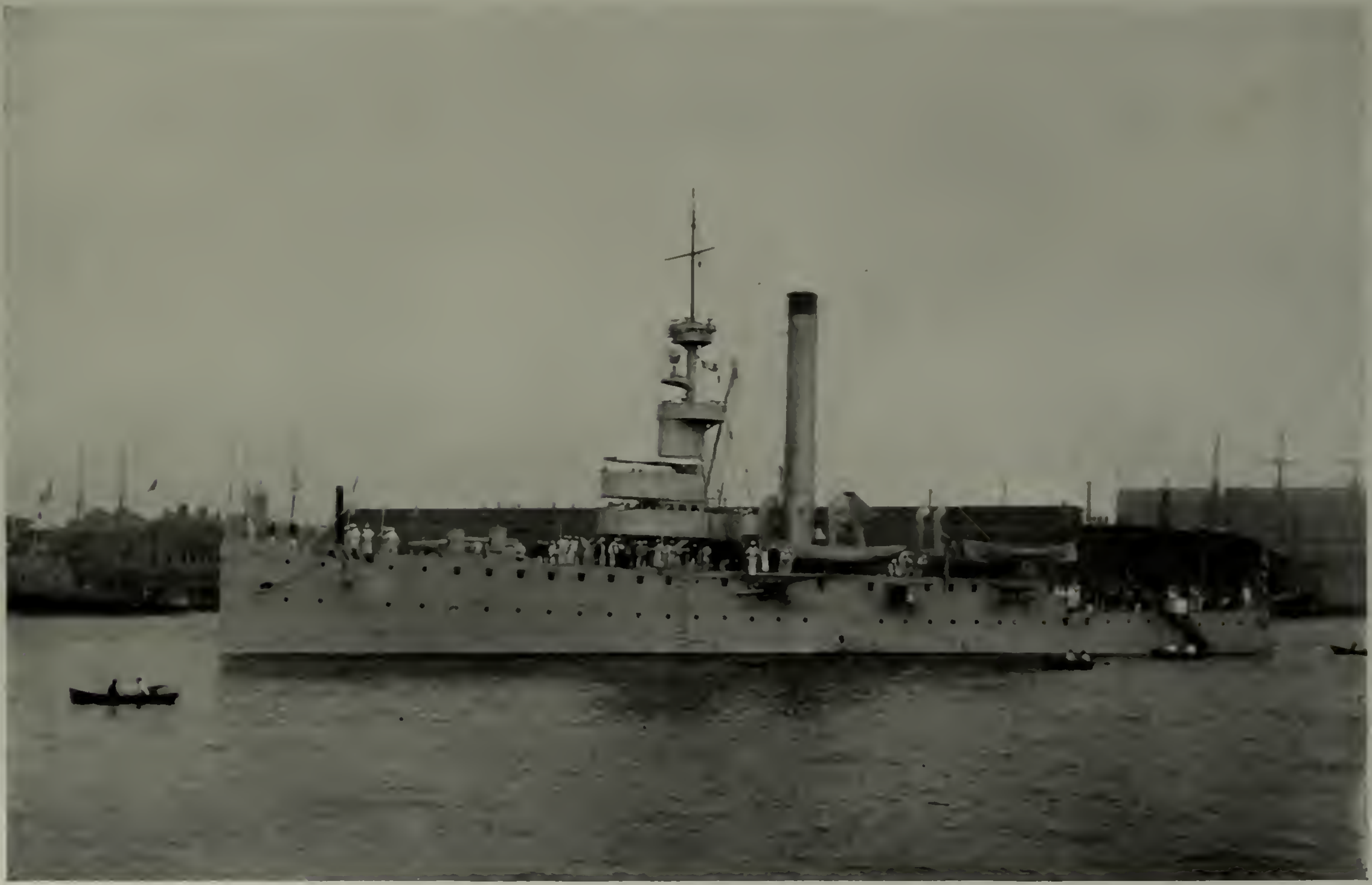
NASHVILLE (Gunboat)

Displacement, 1,371 tons. Length, 220 feet. Beam, 38 feet 1 inch. Draft, 11 feet. Horsepower, 2,524. Speed at trial (mean), 16.30 knots. Armament, eight 4-inch, under 4-inch six. Complement, 11 officers, 171 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1897. Photograph taken, 1899.



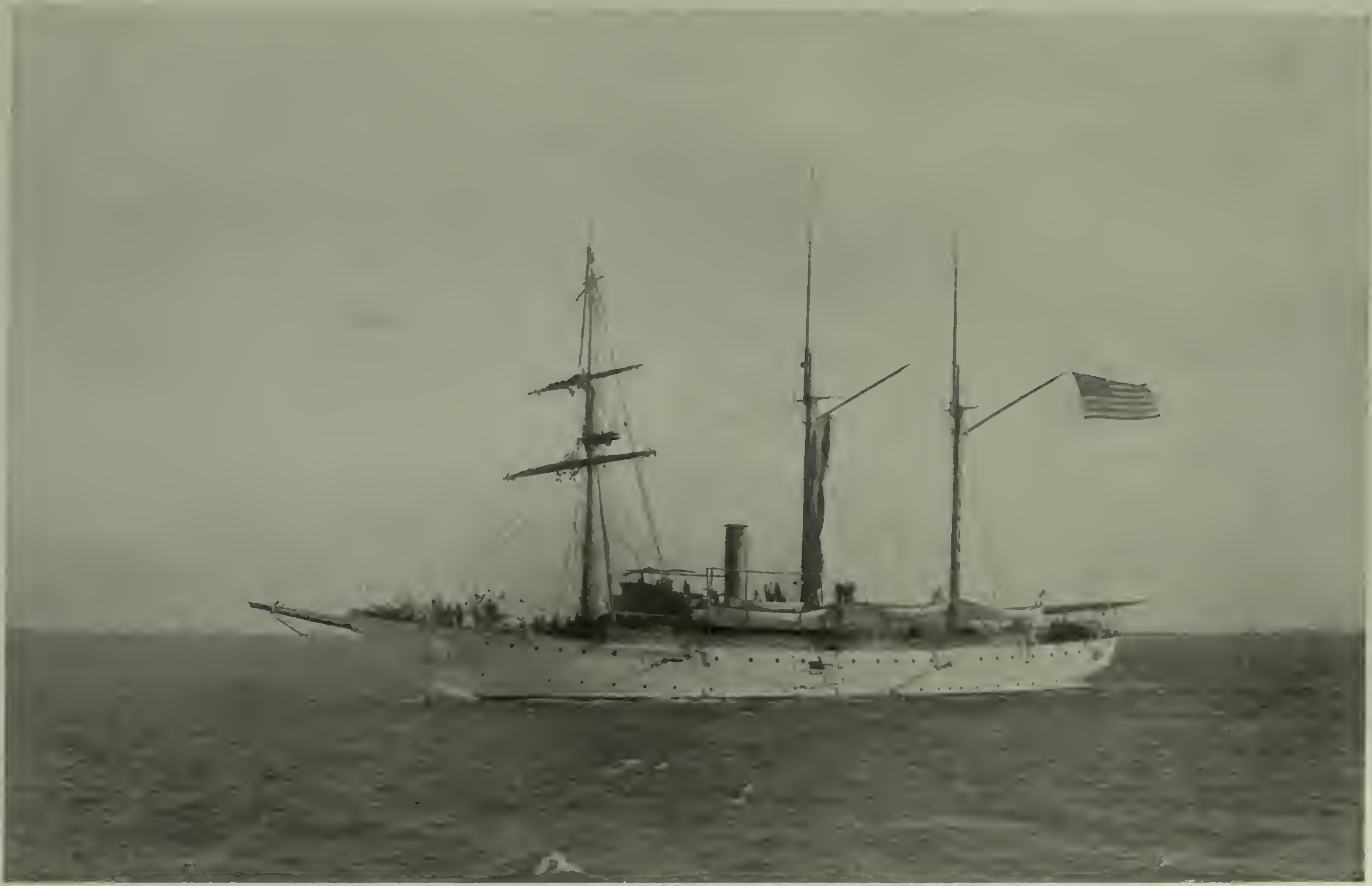
HELENA (Gunboat)

Displacement, 1,392 tons. Length, 250 feet 9 inches. Beam, 39 feet 8 inches. Draft, 9 feet. Horsepower, 1,959. Speed at trial (mean), 15.50 knots. Armament, eight 4-inch, under 4-inch four. Complement, 10 officers, 177 men. Built by Newport News Shipbuilding and Dry Dock Co., Newport News, Va., 1897. Photograph taken, 1898. Same class, Wilmington.



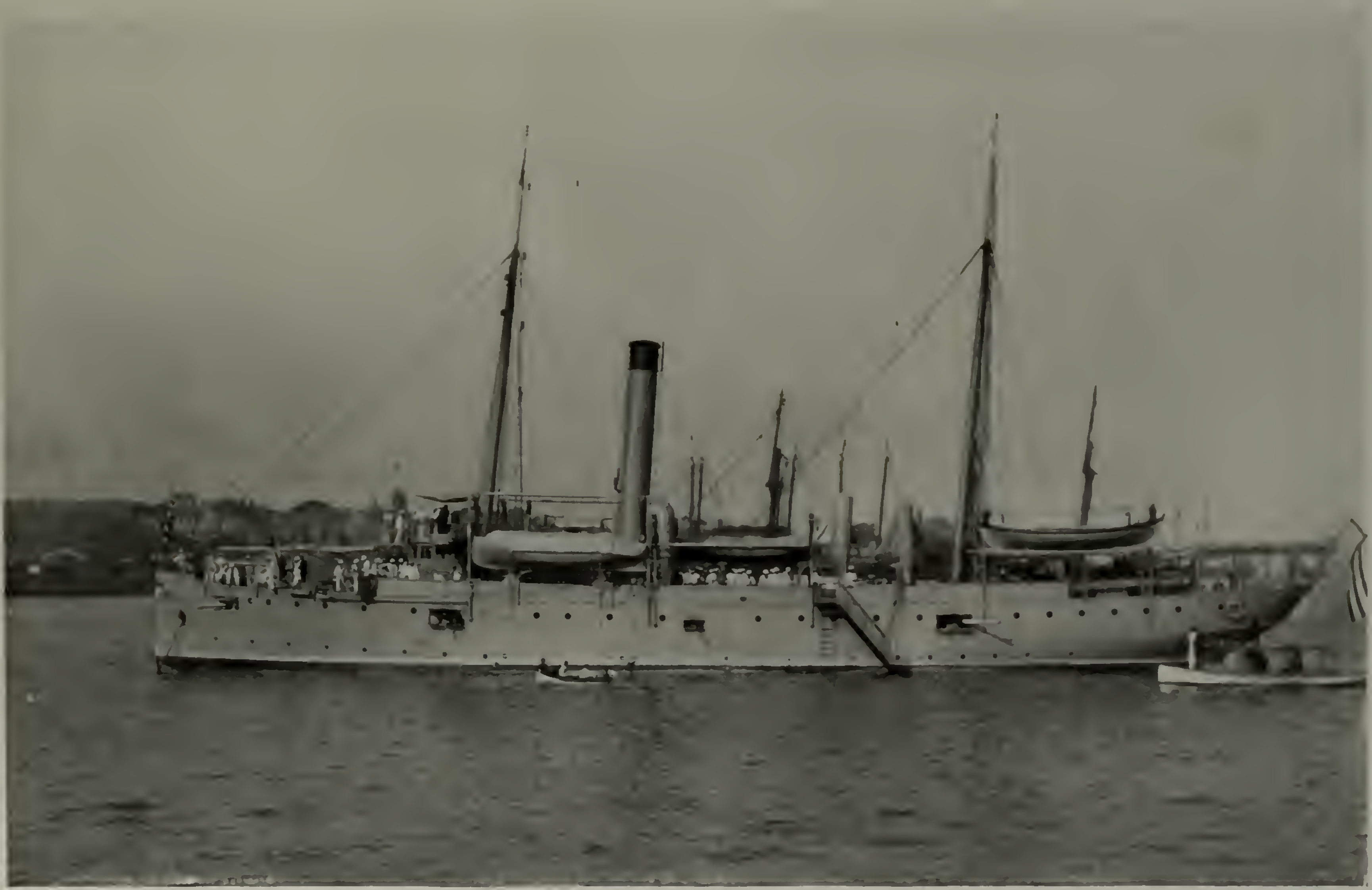
WILMINGTON (Gunboat)

Displacement, 1,392 tons. Length, 250 feet 9 inches. Beam, 39 feet 8 inches. Draft, 9 feet. Horsepower, 1,868. Speed at trial (mean), 15.08 knots. Armament, eight 4-inch, under 4-inch four. Complement, 10 officers, 177 men. Built by Newport News Shipbuilding and Dry Dock Co., Newport News, Va., 1897. Photograph taken, 1898.



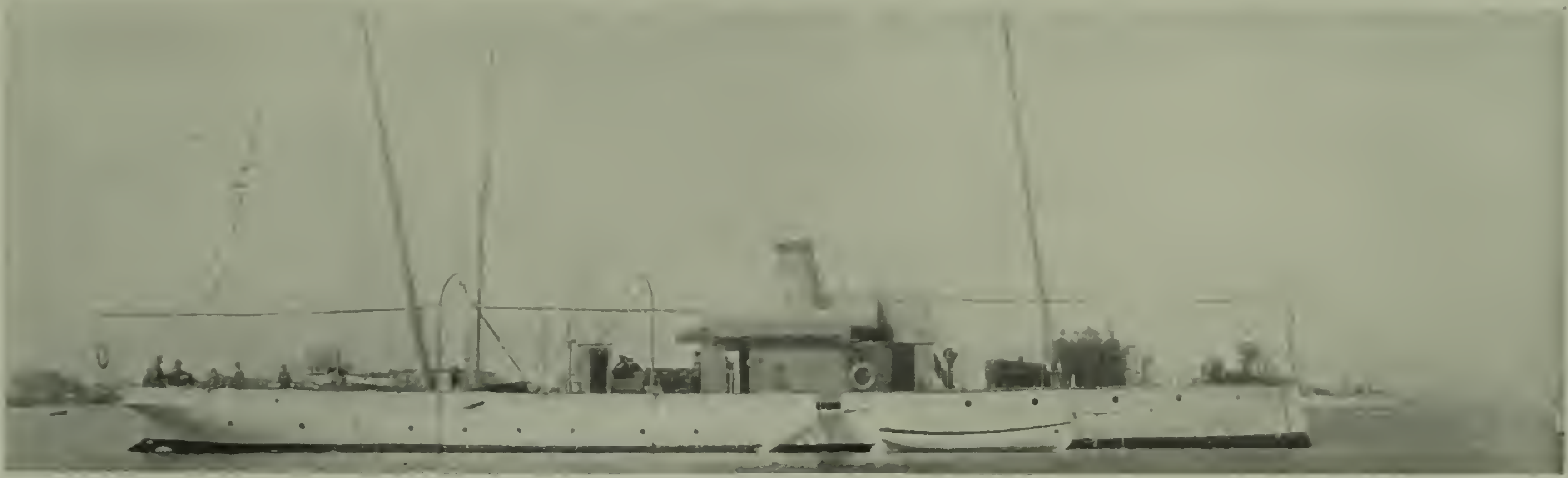
NEWPORT (Gunboat)

Displacement, 1,010 tons. Length, 168 feet. Beam, 36 feet. Draft, 12 feet. Horsepower, 998. Speed on trial (mean), 12.29 knots. Armament, six 4-inch, under 4-inch seven. Complement, 8 officers, 135 men. Built by Bath Iron Works, Bath, Me., 1897. Photograph taken, 1906. Used as Public Marine School, New York, 1911. Same class, Annapolis, Vicksburg, and Princeton.



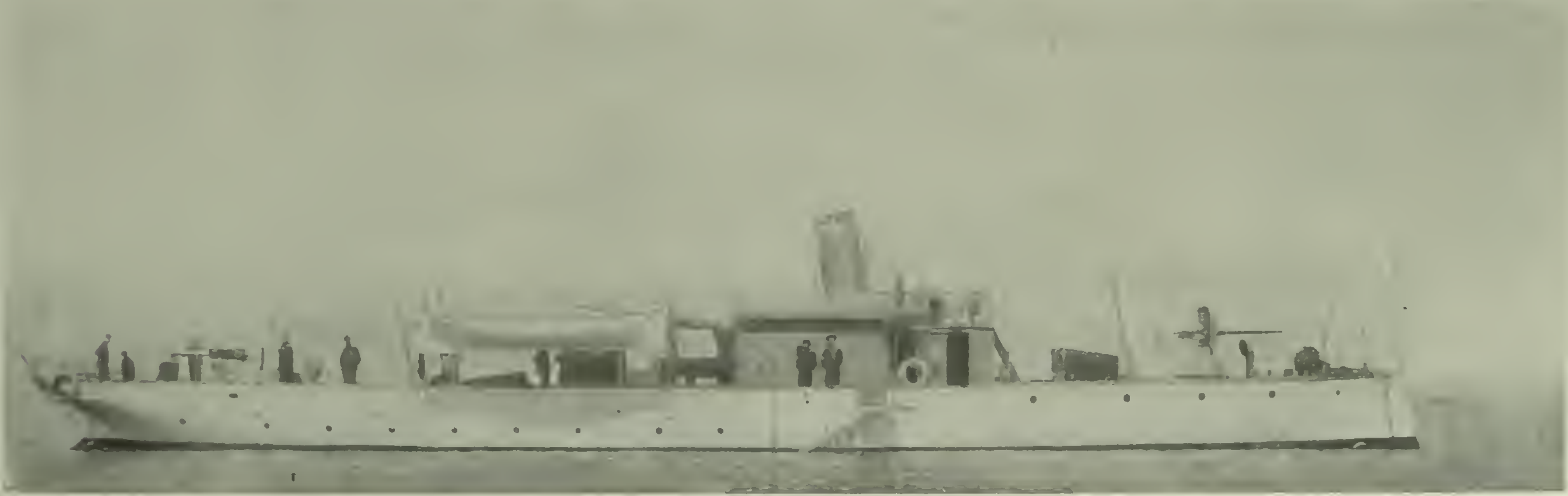
MARIETTA (Gunboat)

Displacement, 990 tons. Length, 174 feet. Beam, 34 feet. Draft, 12 feet. Horsepower, 1,036. Speed at trial (mean), 13.02 knots. Armament, six 4-inch, under 4-inch six. Complement, 8 officers, 155 men. Built by Union Iron Works, San Francisco, Cal., 1897. Photograph taken, 1898. Same class, Wheeling.



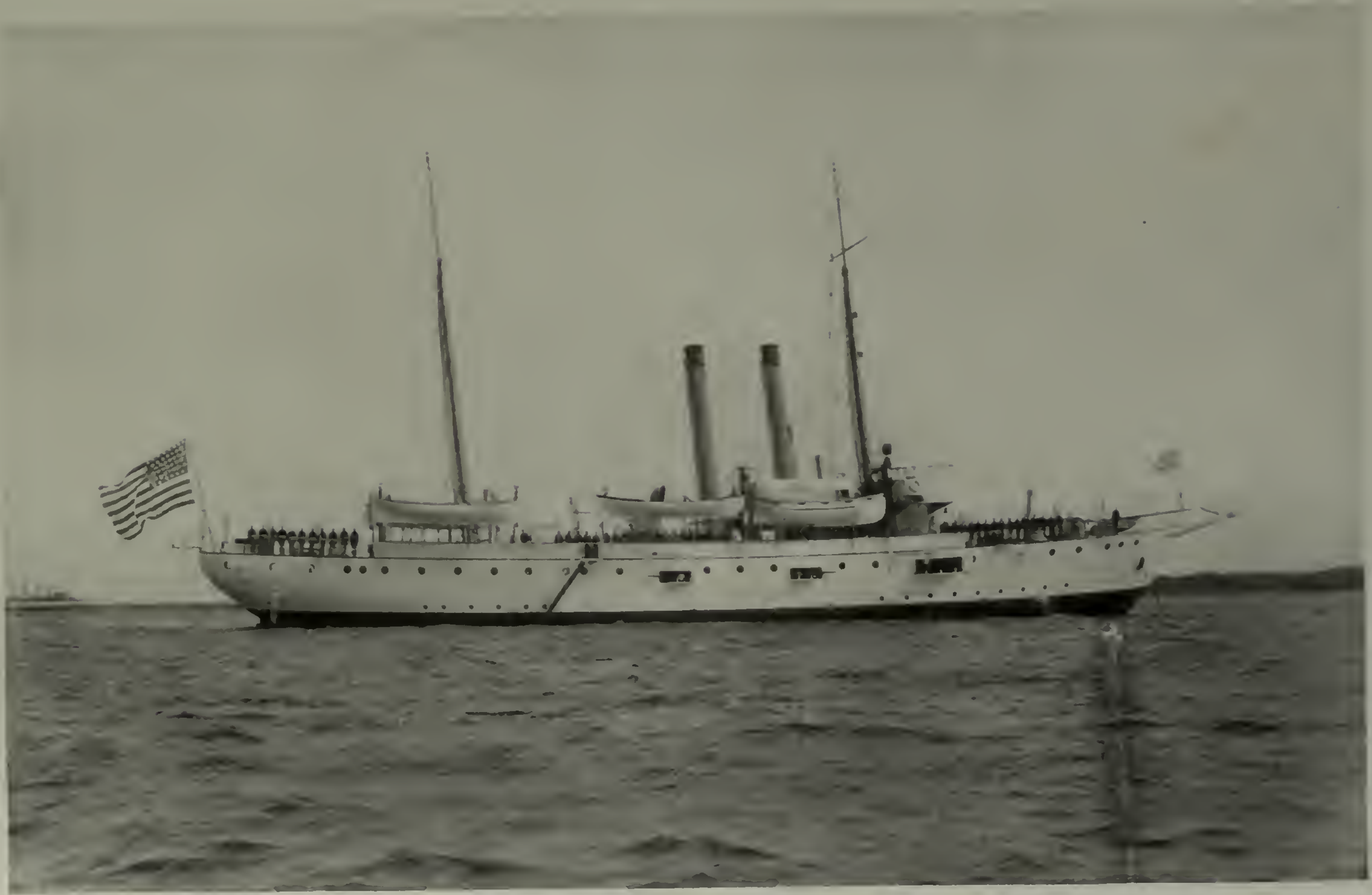
SANDOVAL (Gunboat)

Displacement, 100 tons. Length, 110 feet. Beam, 15 feet 6 inches. Draft, 5 feet 4 inches. Horsepower, 666 (estimated). Speed, 9 knots (estimated). Armament, under 4-inch six. Complement, 21 men. Built at Clydebank, Scotland. Captured during Spanish-American War. Photograph taken, 1899. Assigned to New York Naval Militia, 1906.



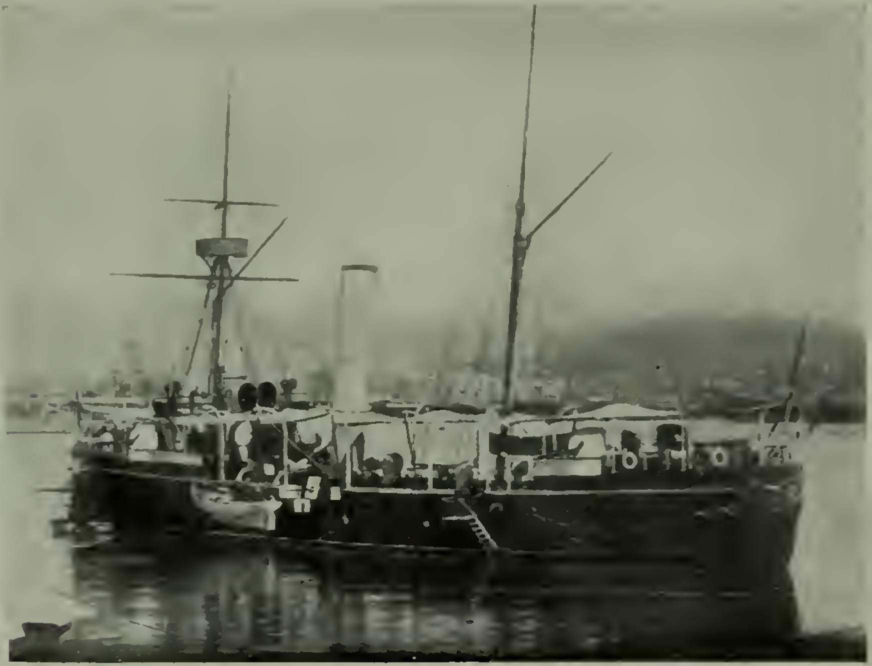
ALVARADO (Gunboat)

Displacement, 100 tons. Length, 110 feet. Beam, 15 feet 6 inches. Draft, 5 feet 4 inches. Horsepower, 690 (estimated). Speed, 9 knots (estimated). Complement, 21 men. Armament, under 4-inch six. Captured during Spanish-American War. Built at Clydebank, Scotland. Photograph taken in 1899. Assigned to Louisiana Naval Militia.



DUBUQUE (Gunboat)

Displacement, 1,085 tons. Length, 174 feet. Beam, 35 feet. Draft, 12 feet 3 inches. Horsepower, 1,193. Speed at trial (mean), 12.90 knots. Armament, six 4-inch, under 4-inch six. Complement, 8 officers, 154 men. Built by Gas Engine & Power & Seabury Co., Morris Heights, New York City, 1905. Photograph taken, 1905. Assigned to Illinois Naval Militia, 1911. Same class, Paducah.

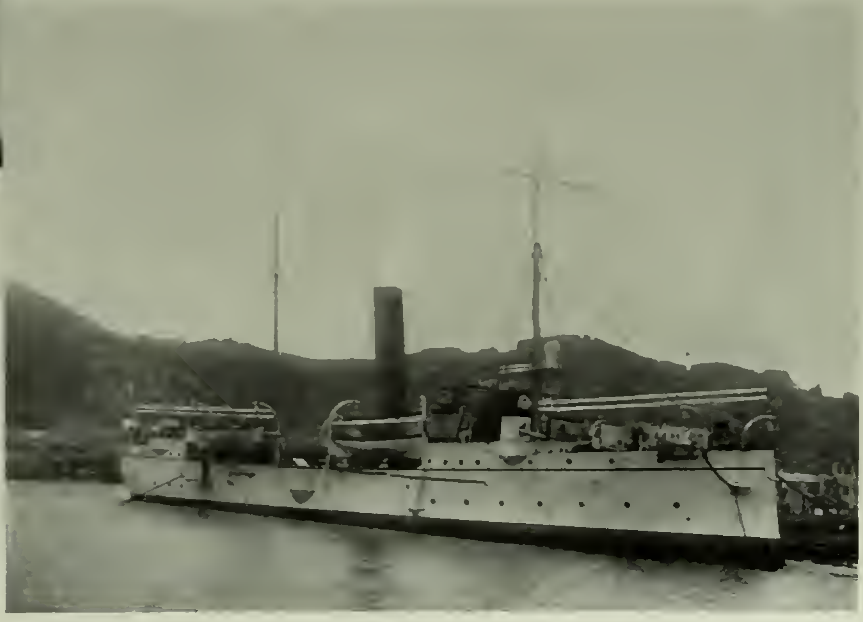


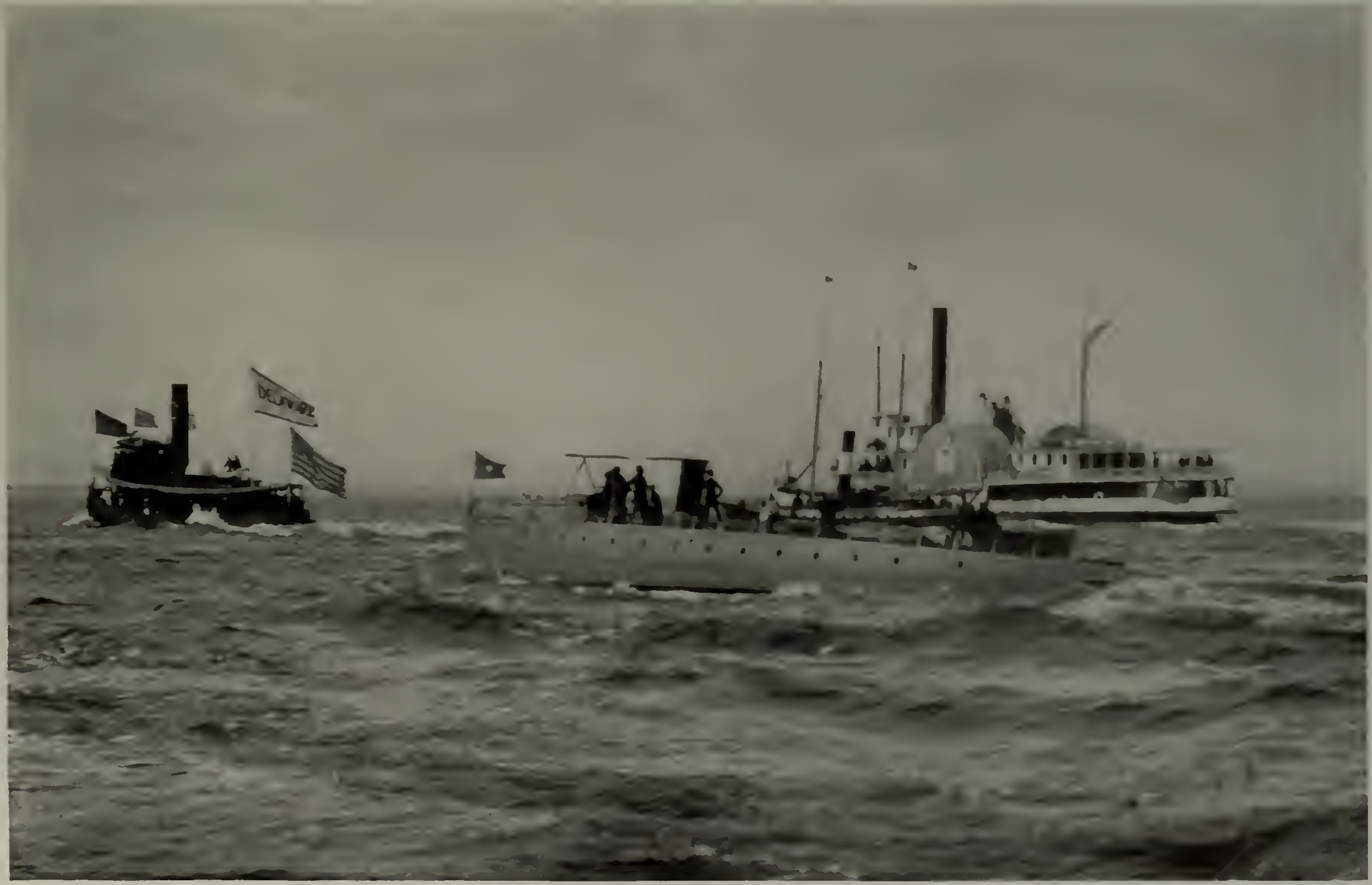
ISLA DE CUBA (Gunboat)

Displacement, 1,030 tons. Length, 192 feet 10 inches. Beam, 30 feet 1½ inches. Draft, 11 feet 6 inches. Horsepower, 844. Speed at trial, 13.08 knots. Armament, two 4-inch, under 4-inch six. Complement, 8 officers, 137 men. Built at Newcastle-on-Tyne, England, 1886. Captured during the war with Spain.

ISLA DE LUZON (Gunboat)

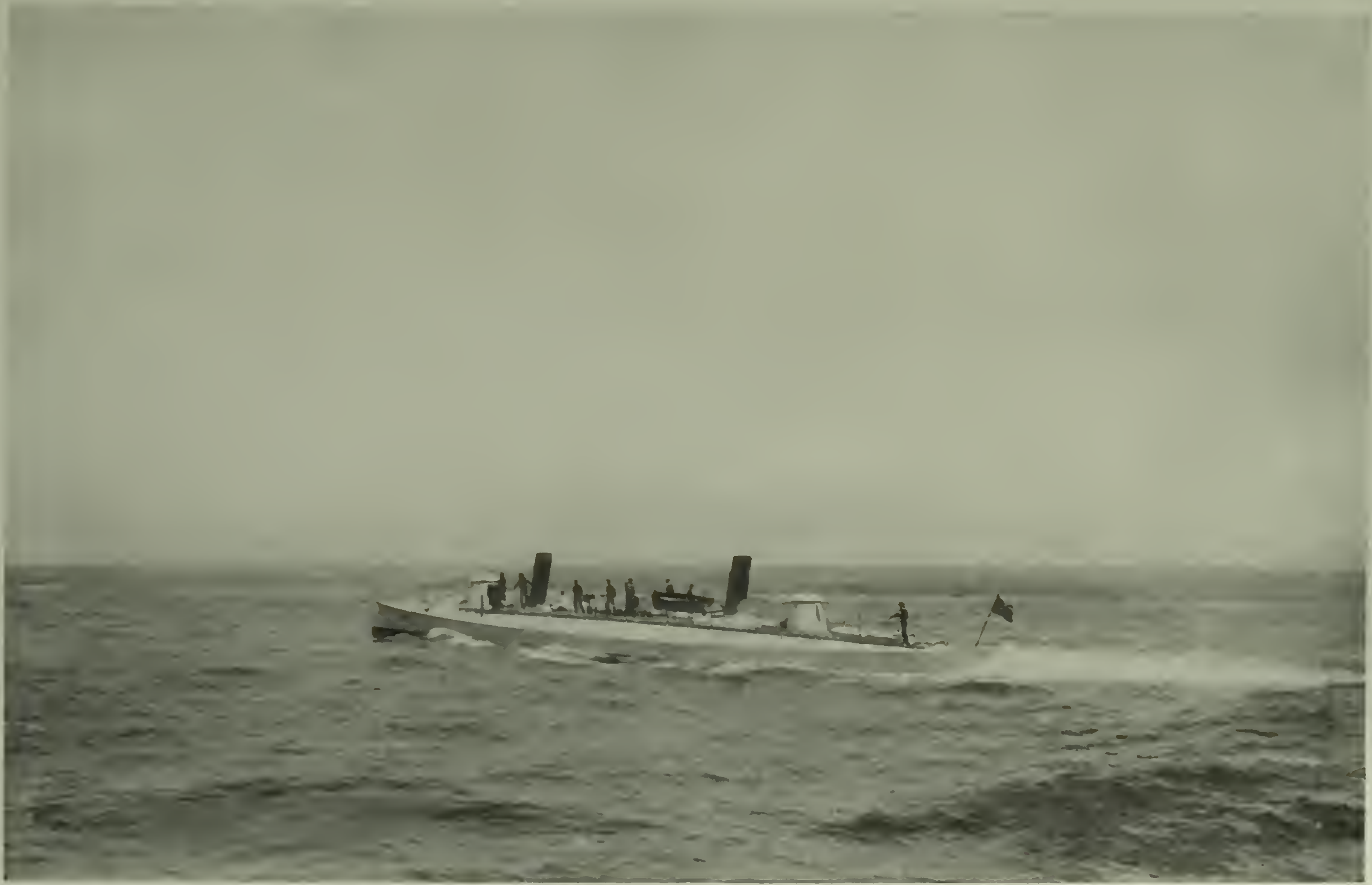
Displacement, 1,030 tons. Length, 192 feet 10 inches. Beam, 30 feet 1½ inches. Draft, 11 feet 6 inches. Horsepower, 516. Speed at trial, 11.23 knots. Armament, four 4-inch, under 4-inch six. Complement, 8 officers, 137 men. Built at Newcastle-on-Tyne, England, 1887. Captured during the war with Spain. Assigned to Naval Militia, Louisiana, 1911. Same class, Isla de Cuba.





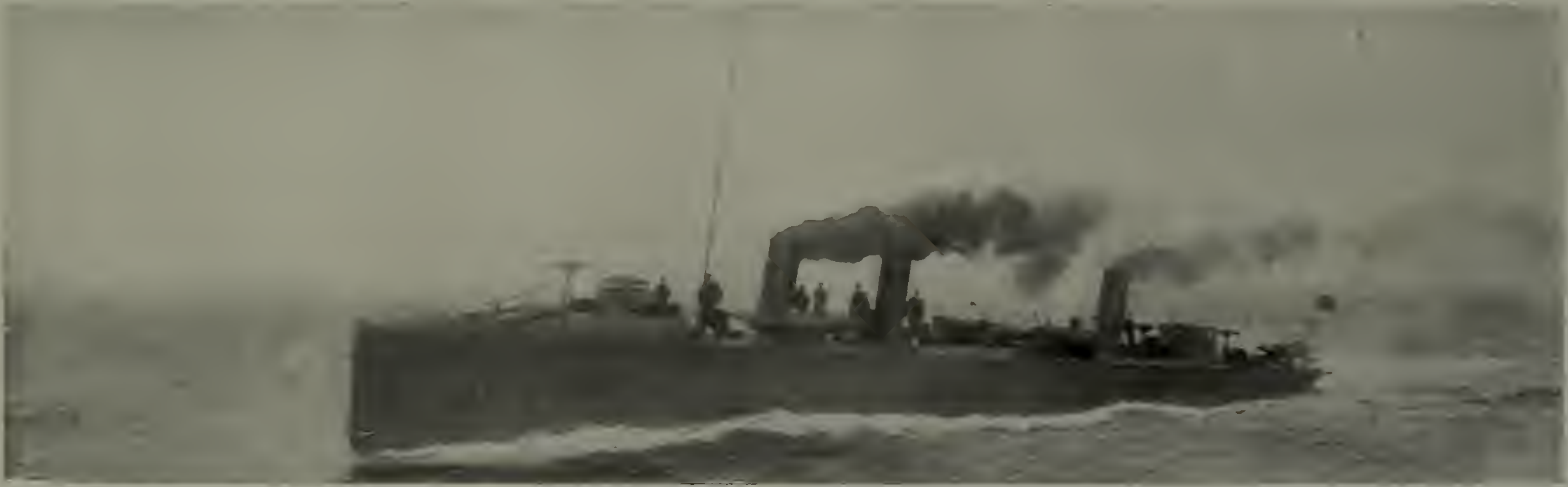
STILETTO (Torpedo Boat)

Displacement, 31 tons. Length, 88 feet 6 inches. Beam, 11 feet. Draft, 3 feet. Horsepower, 359. Speed, 18.22 knots. Built by Herreshoff Mfg. Co., Bristol, R. I., 1885, as a yacht. Photograph taken, 1886.



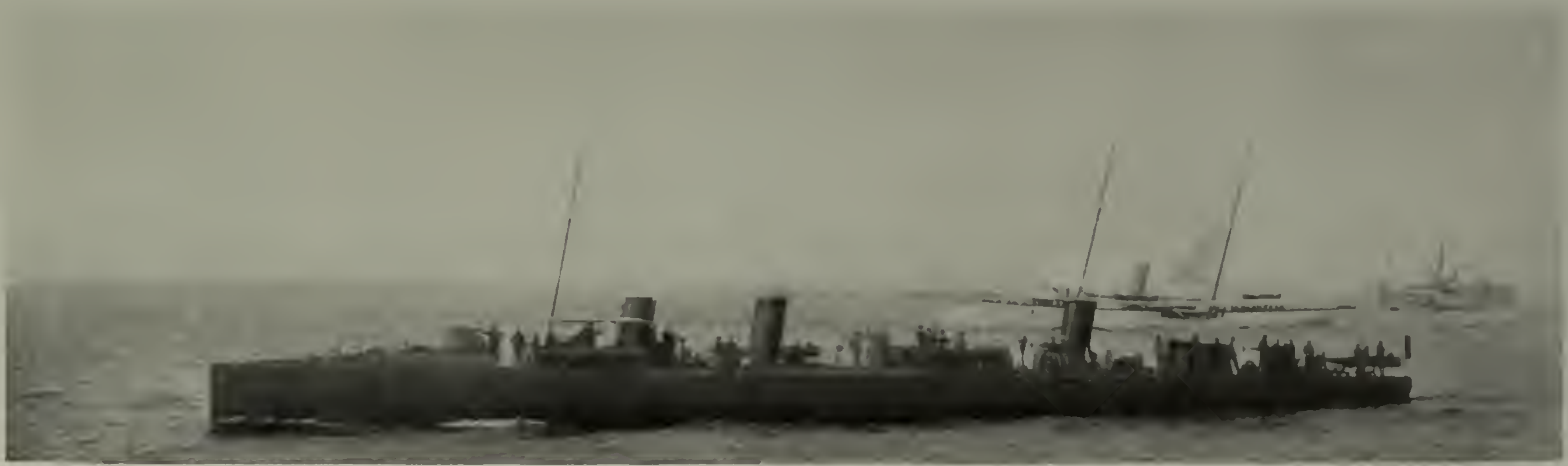
CUSHING (Torpedo Boat)

Displacement, 105 tons. Length, 138 feet 9 inches. Beam, 14 feet 3 inches. Draft, 4 feet 10 inches. Horsepower, 1,720. Speed on trial, 22.50 knots. Armament, 3 one-pounders, two 18-inch tubes. Complement, 2 officers, 21 men. Built by Herreshoff Mfg. Co., Bristol, R. I., 1890. Photograph taken, 1890.



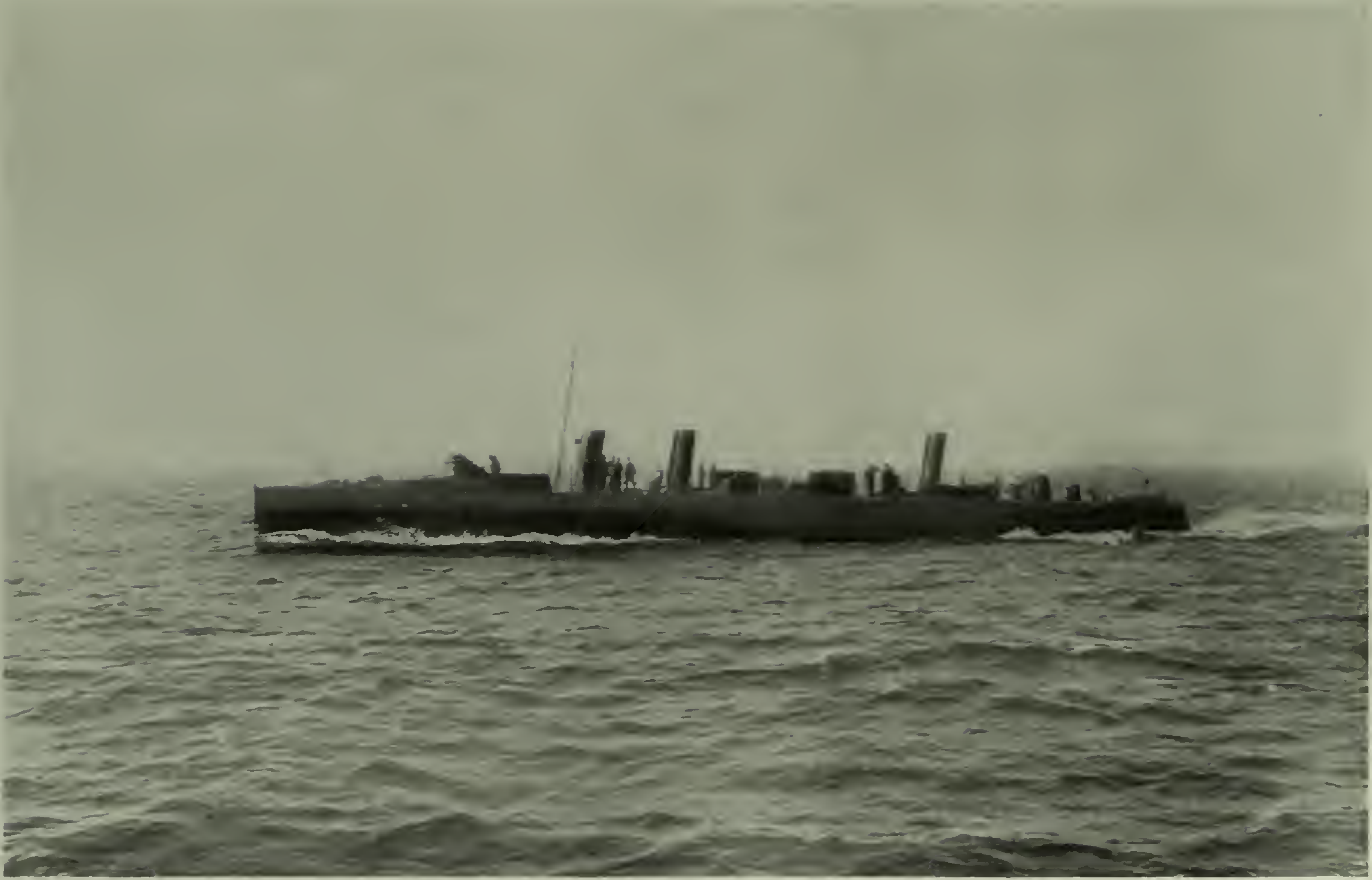
PORTER (Torpedo Boat)

Displacement, 165 tons. Length, 175 feet. Beam, 17 feet 8½ inches. Draft, 4 feet 8 inches. Horsepower, 3,500. Speed on trial, 28.63 knots. Armament, three 1-pounders, three 18-inch tubes. Complement, 2 officers, 30 men. Built by Herreshoff Mfg. Co., Bristol, R. I., 1897. Photograph taken, 1897. Same class, Dupont.



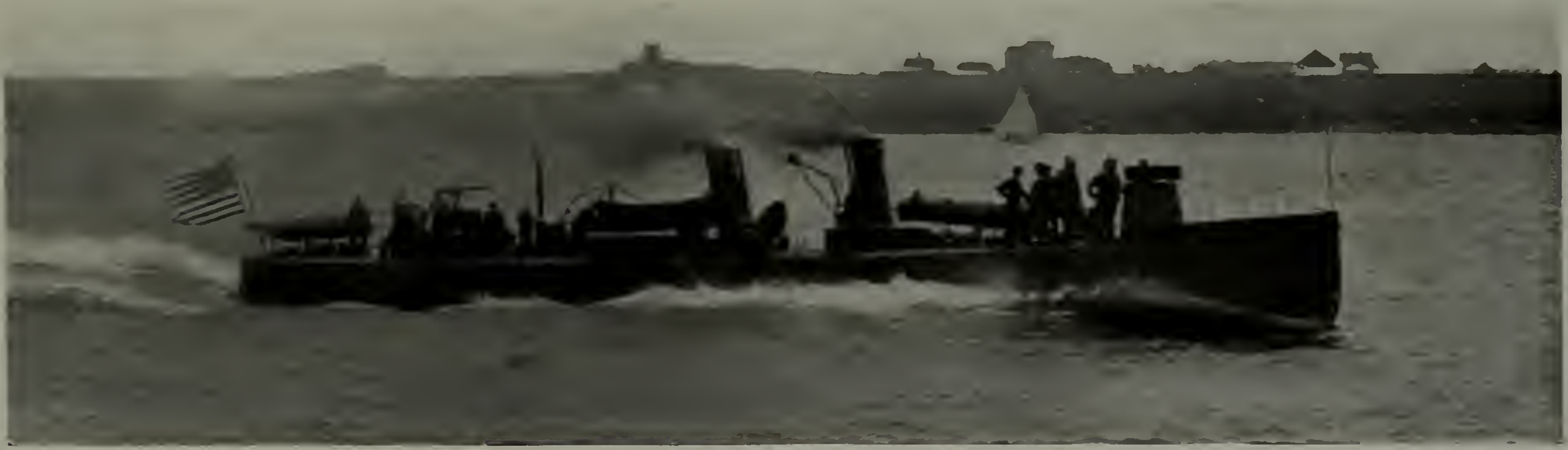
DUPONT (Torpedo Boat)

Displacement, 165 tons. Length, 175 feet. Beam, 17 feet 8½ inches. Draft, 4 feet 8 inches. Horsepower, 3,800. Speed on trial, 28.58 knots. Armament, four 1-pounders, three 18-inch tubes. Complement, 2 officers, 30 men. Built by Herreshoff Mfg. Co., Bristol, R. I., 1897. Photograph taken, 1899.



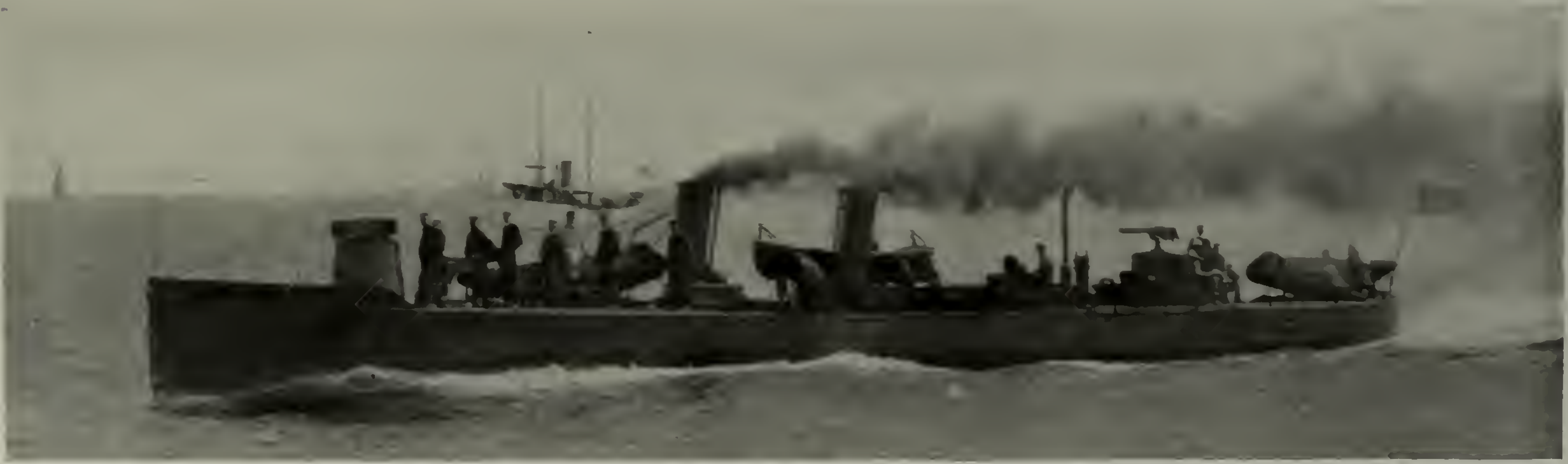
BLAKELY (Torpedo Boat)

Displacement, 196 tons. Length, 175 feet 1 inch. Beam, 17 feet 9 inches. Draft, 5 feet 11 inches. Horsepower, 3,000. Speed on trial, 25.58 knots. Armament, three 1-pounders, three 18-inch tubes. Complement, 2 officers, 30 men. Built by Geo. Lawley & Son Corporation, Boston, Mass., 1904. Photograph taken, 1901. Same class, Shubrick, Thornton, Stockton, DeLong, Wilkes and Tingey.



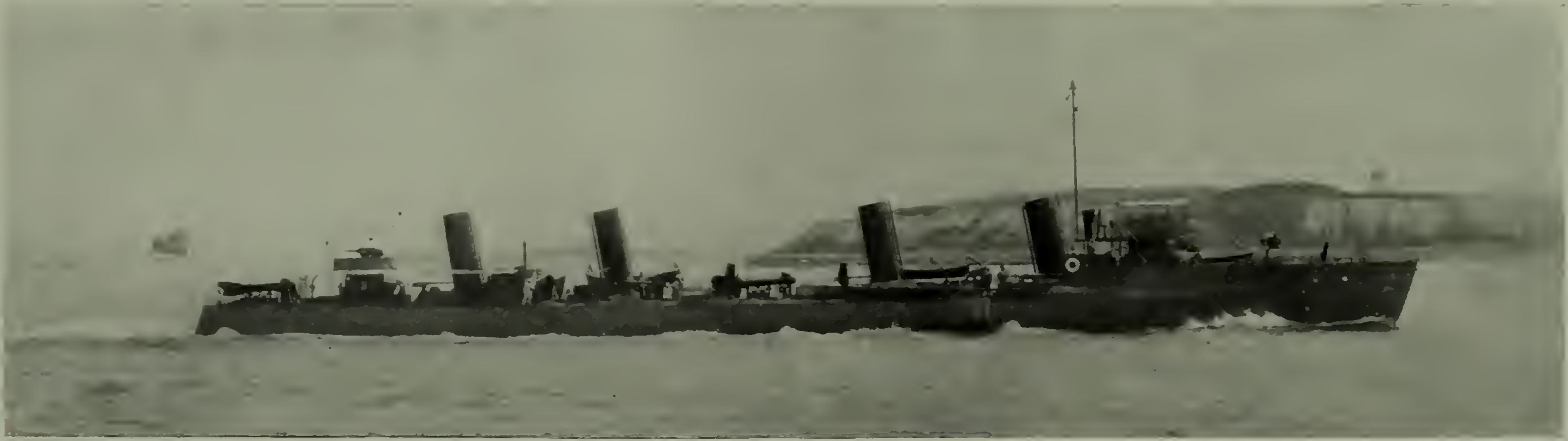
GWIN (Torpedo Boat)

Displacement, 46 tons. Length, 99 feet 6 inches. Beam, 12 feet 6 inches. Draft, 3 feet 3 inches. Horsepower, 850. Speed on trial, 20.88 knots. Armament, one 1-pounder and two 18-inch tubes. Complement, 2 officers, 13 men. Built by Herreshoff Mfg. Co., Bristol, R. I., 1898. Photograph taken, 1899. Same class, Talbot.



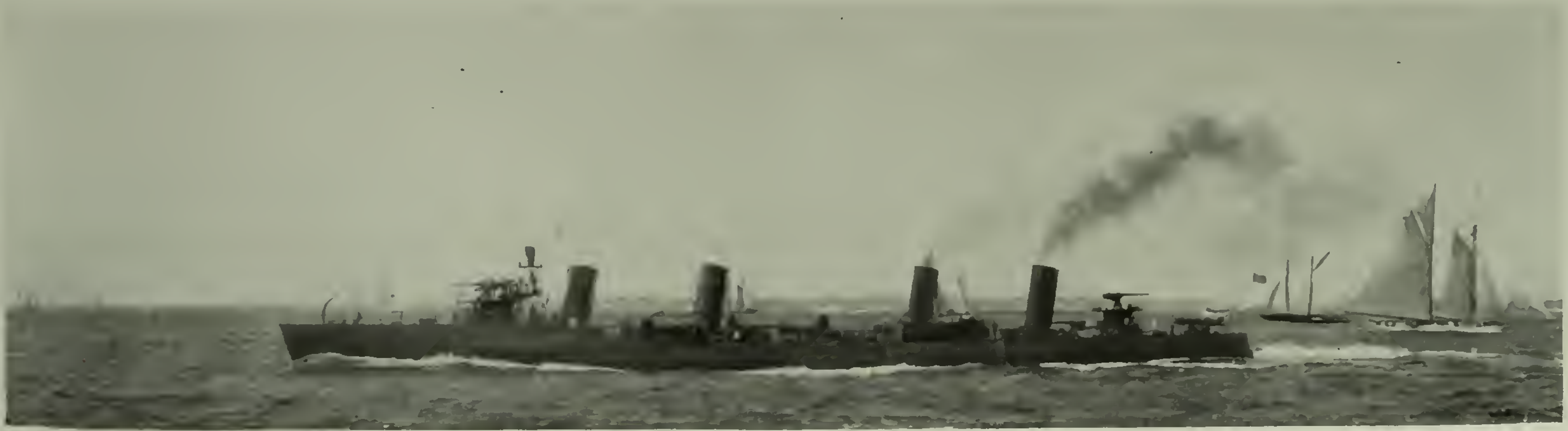
MACKENZIE (Torpedo Boat)

Displacement, 65 tons. Length, 99 feet 3 inches. Beam, 12 feet 9 inches. Draft, 4 feet 3 inches. Horsepower, 850. Speed on trial, 20.11 knots. Armament, one 1-pounder, two 18-inch tubes. Complement, 2 officers, 13 men. Built by Chas. Hillman Co., Philadelphia, Pa., 1899. Photograph taken, 1899. Same class, McKee.



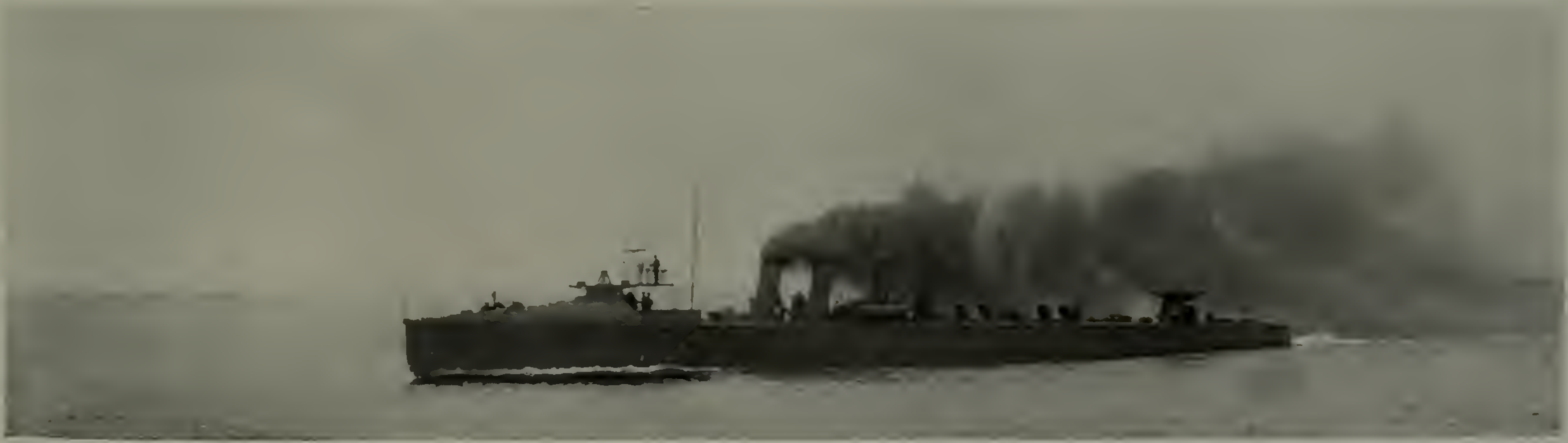
DALE (Torpedo Boat Destroyer)

Displacement, 420 tons. Length, 245 feet. Beam, 23 feet 1 inch. Draft, 6 feet 6 inches. Horsepower, 8,000. Speed at trial, 28 knots. Armament, two 14-pounders, five 6-pounders, two 18-inch tubes. Complement, 3 officers, 72 men. Built by W. R. Trigg Co., Richmond, Va., 1902. Photograph taken, 1903.



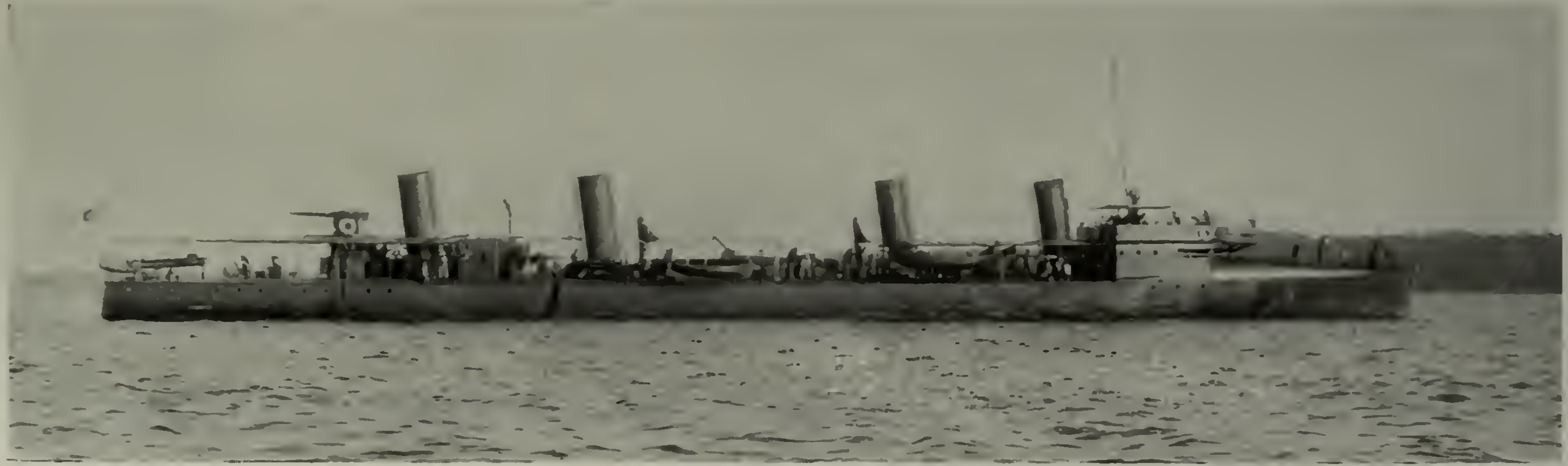
DECATUR (Torpedo Boat Destroyer)

Displacement, 245 tons. Length, 245 feet. Beam, 23 feet 1 inch. Draft, 6 feet 6 inches. Horsepower, 8,000. Speed at trial, 28.10 knots. Armament, two 3-inch, five 6-pounders, and two 18-inch tubes. Complement, 3 officers, 73 men. Built by W. R. Trigg Co., Richmond, Va., 1902. Photograph taken, 1902. Same class, Barry, Dale, Bainbridge, Chauncey, Paul Jones, Perry, Preble and Stewart.



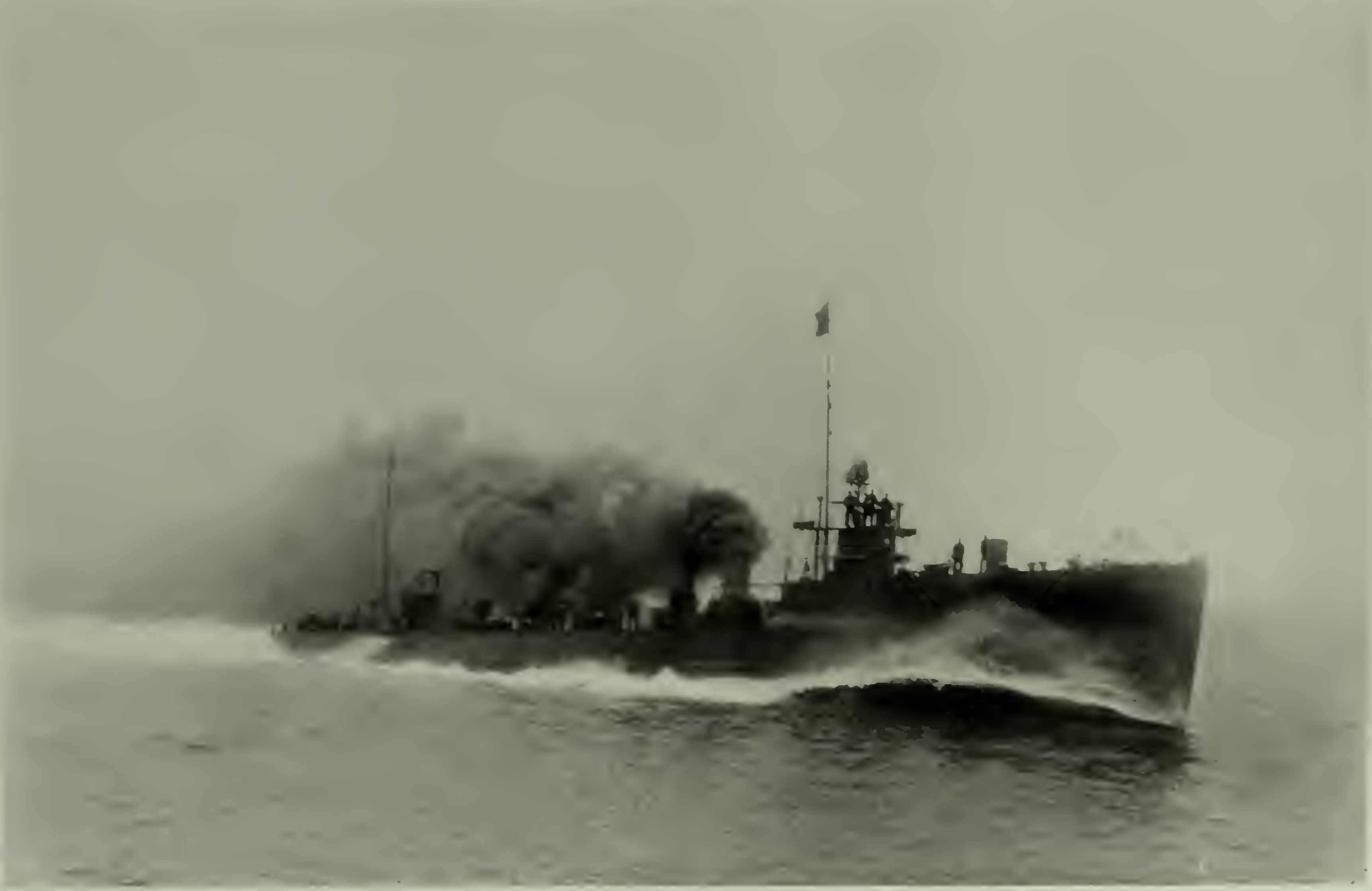
LAWRENCE (Torpedo Boat Destroyer)

Displacement, 400 tons. Length, 240 feet 7 inches. Beam, 22 feet 2½ inches. Draft, 6 feet 2 inches. Horsepower, 8,400. Speed at trial, 28.41 knots. Armament, seven 6-pounders, two 18-inch torpedo tubes. Complement, 3 officers, 75 men. Built by Fore River Shipbuilding Co., Quincy, Mass., 1901. Photograph taken, 1903. Same class, Macdonough.



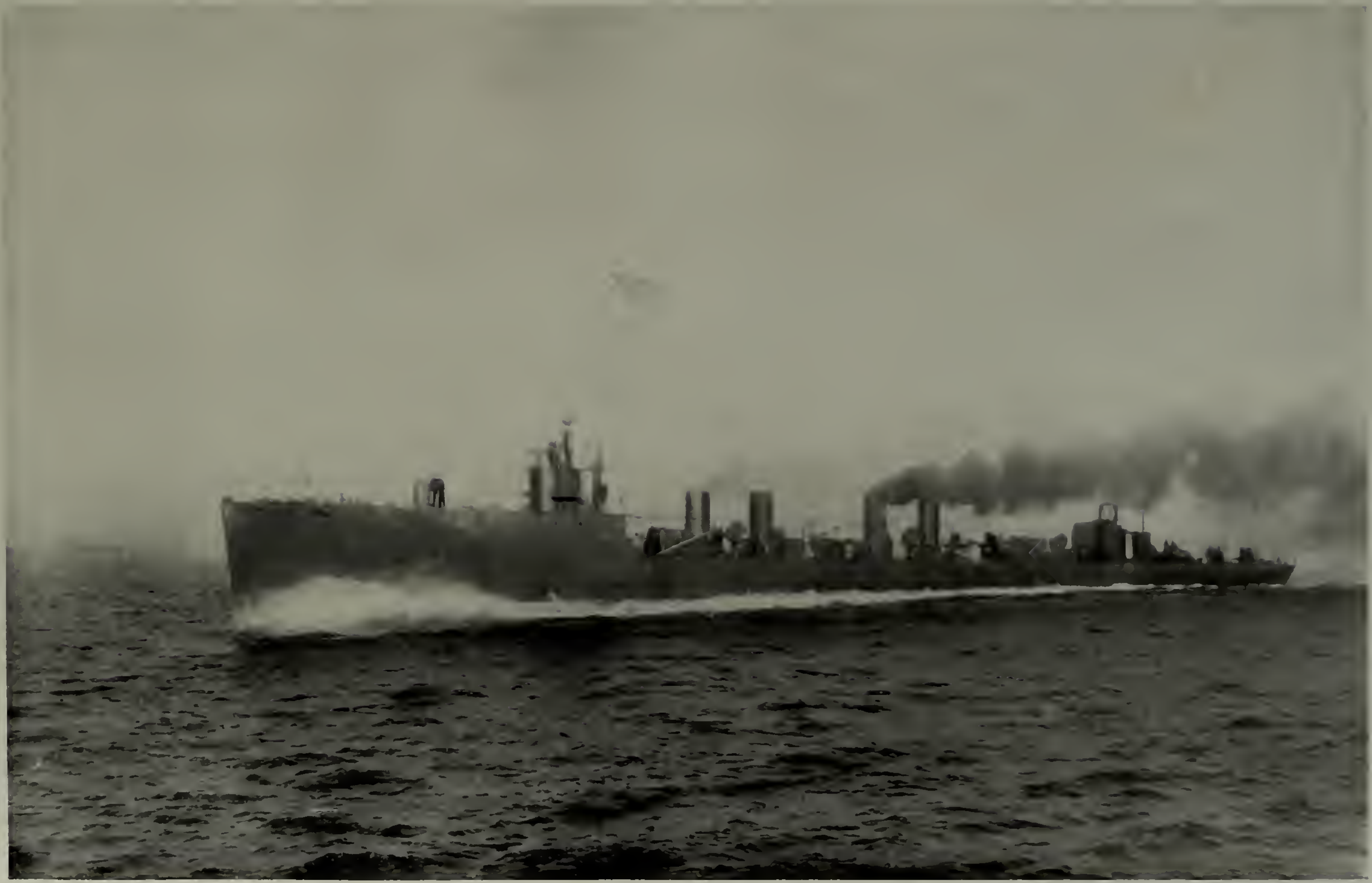
HOPKINS (Torpedo Boat Destroyer)

Displacement, 408 tons. Length, 238 feet 9 inches. Beam, 23 feet 1½ inches. Draft, 6 feet. Horsepower, 8,456. Speed on trial, 29.02 knots. Armament, two 14-pounders, five 6-pounders and two 18-inch tubes. Complement, 3 officers, 75 men. Built by Harlan & Hollingsworth Co., Wilmington, Del., 1903. Photograph taken, 1906. Same class, Hull.



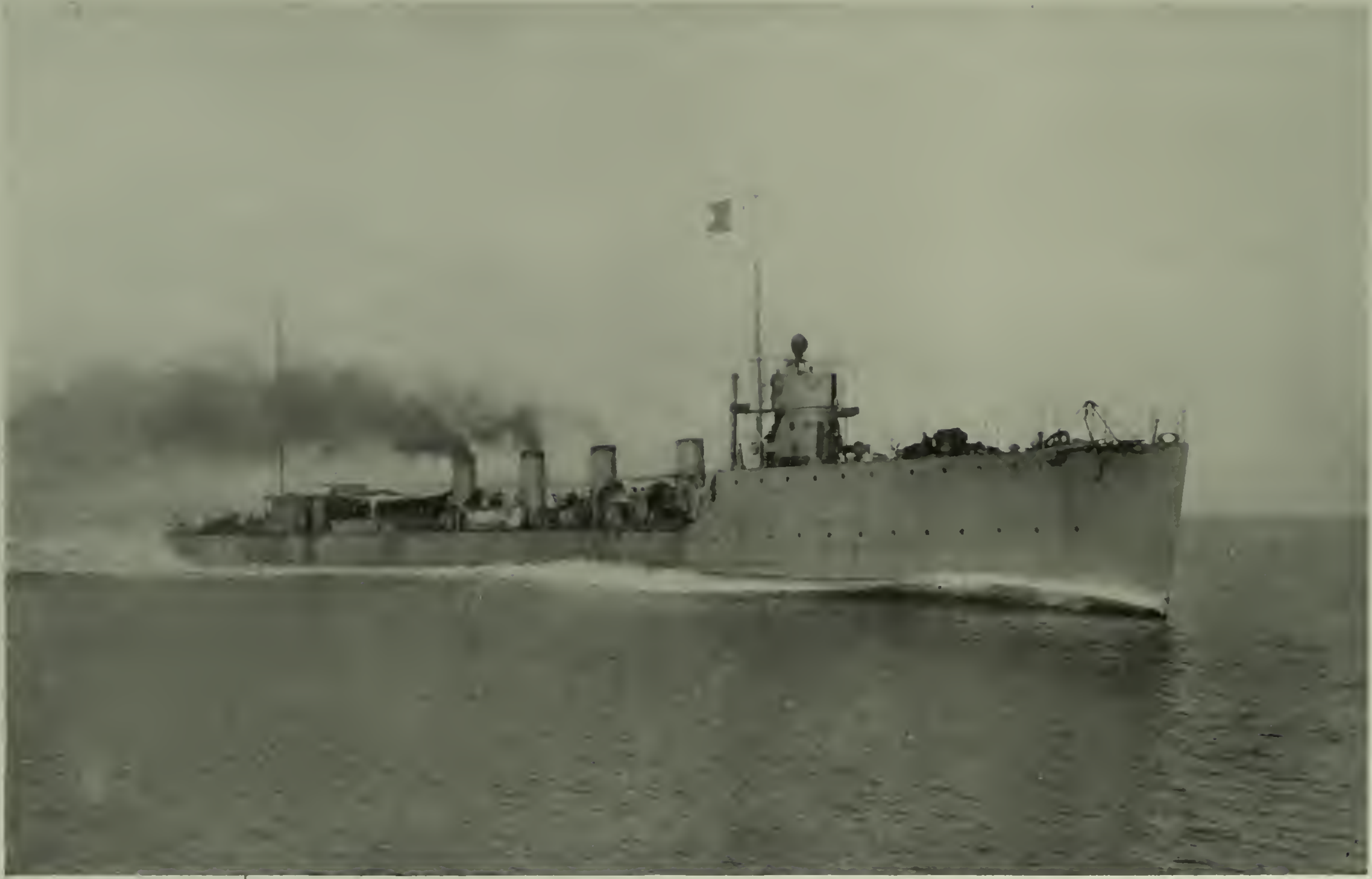
FLUSSER (Torpedo Boat Destroyer)

Displacement, 700 tons. Length, 289 feet. Beam, 26 feet. Draft, 8 feet. Horsepower, 12,541 (three Parsons turbines). Speed on 4-hour trial (mean), 30.41 knots. Armament, five 3-inch guns and three 18-inch tubes. Complement, 4 officers, 83 men. Built by Bath Iron Works, Bath, Me., 1909. Photograph taken on trial, 1909, at 32.83 knots. Same class, Reid, Preston, Smith, Lamson.



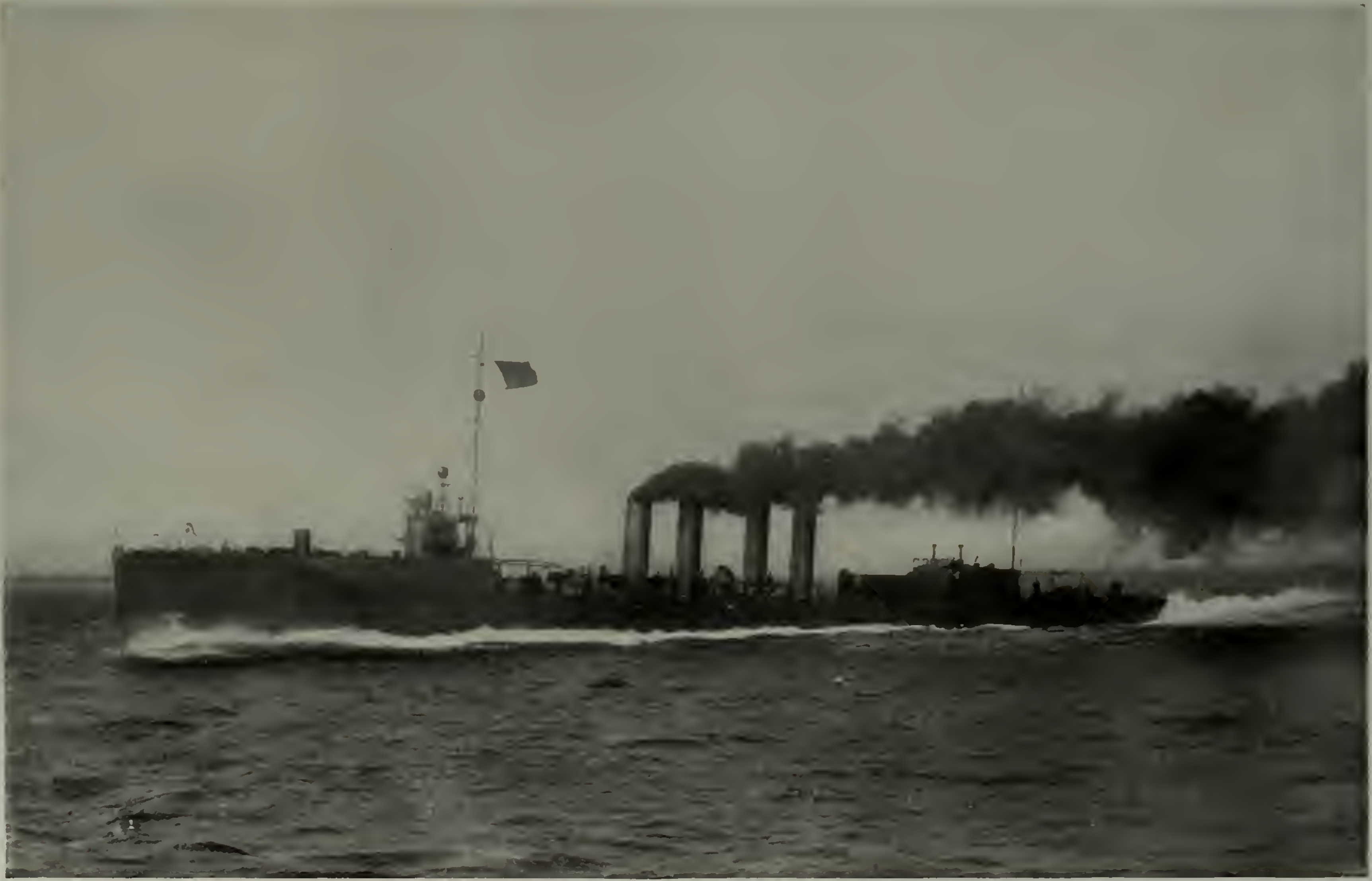
REID (Torpedo Boat Destroyer)

Displacement, 700 tons. Length, 289 feet. Beam, 26 feet. Draft, 8 feet. Horsepower, 12,421 (three Parsons turbines). Speed on 4-hour trial (mean), 31.82 knots. Armament, five 3-inch guns and three 18-inch tubes. Complement, 4 officers, 83 men. Built by Bath Iron Works, Bath, Me., 1909. Photograph taken on trial, 1909, at 33.69 knots.



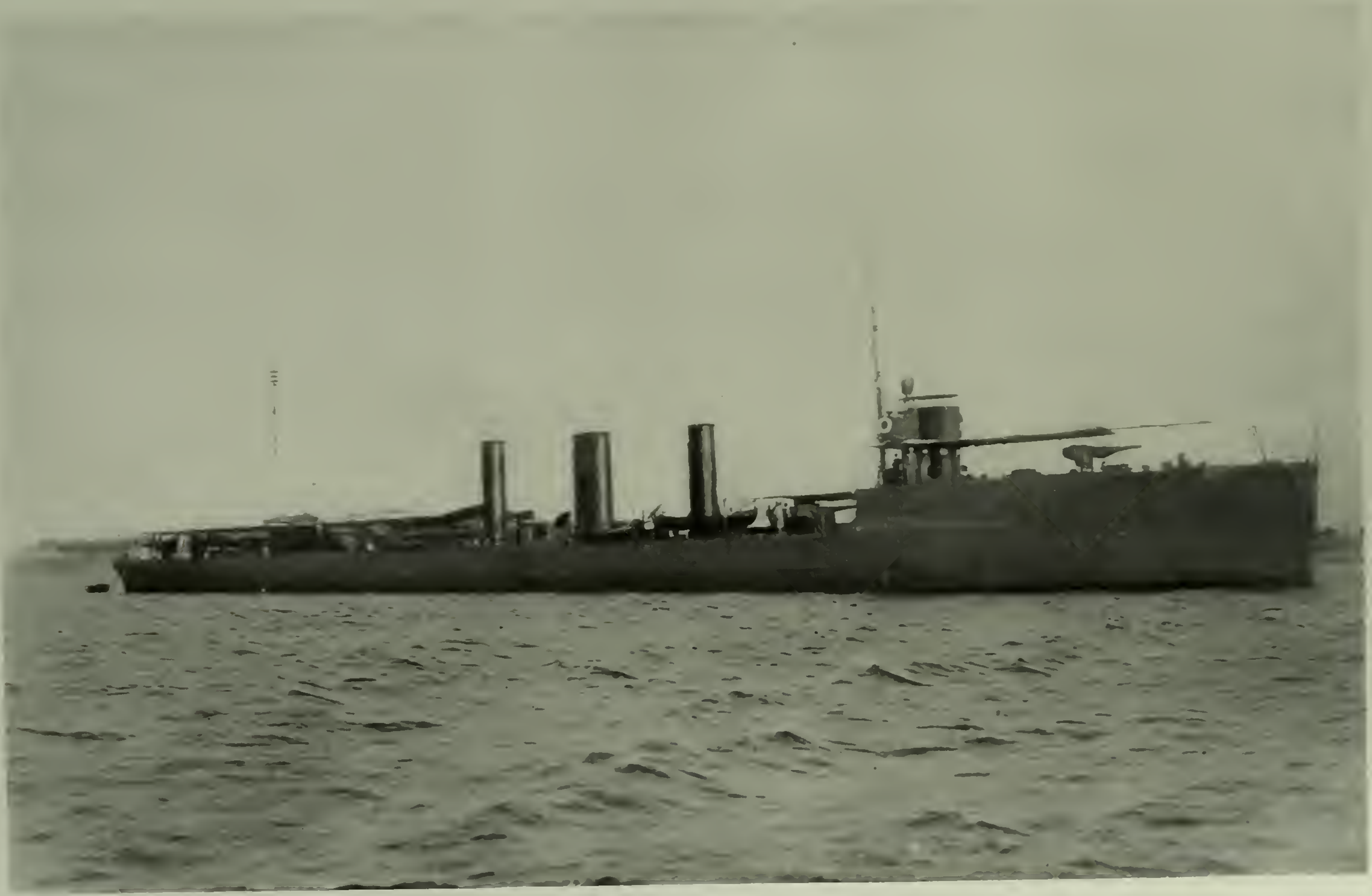
PRESTON (Torpedo Boat Destroyer)

Displacement, 700 tons. Length, 289 feet. Beam, 26 feet. Draft, 8 feet. Horsepower, 10,918 (three Parsons turbines). Speed at trial (mean), 29.18 knots. Armament, five 3-inch guns, and three 18-inch torpedo tubes. Complement, 4 officers, 83 men. Built by New York Shipbuilding Co., Camden, N. J., 1909. Photograph taken on trial, 1909, at 30.35 knots.



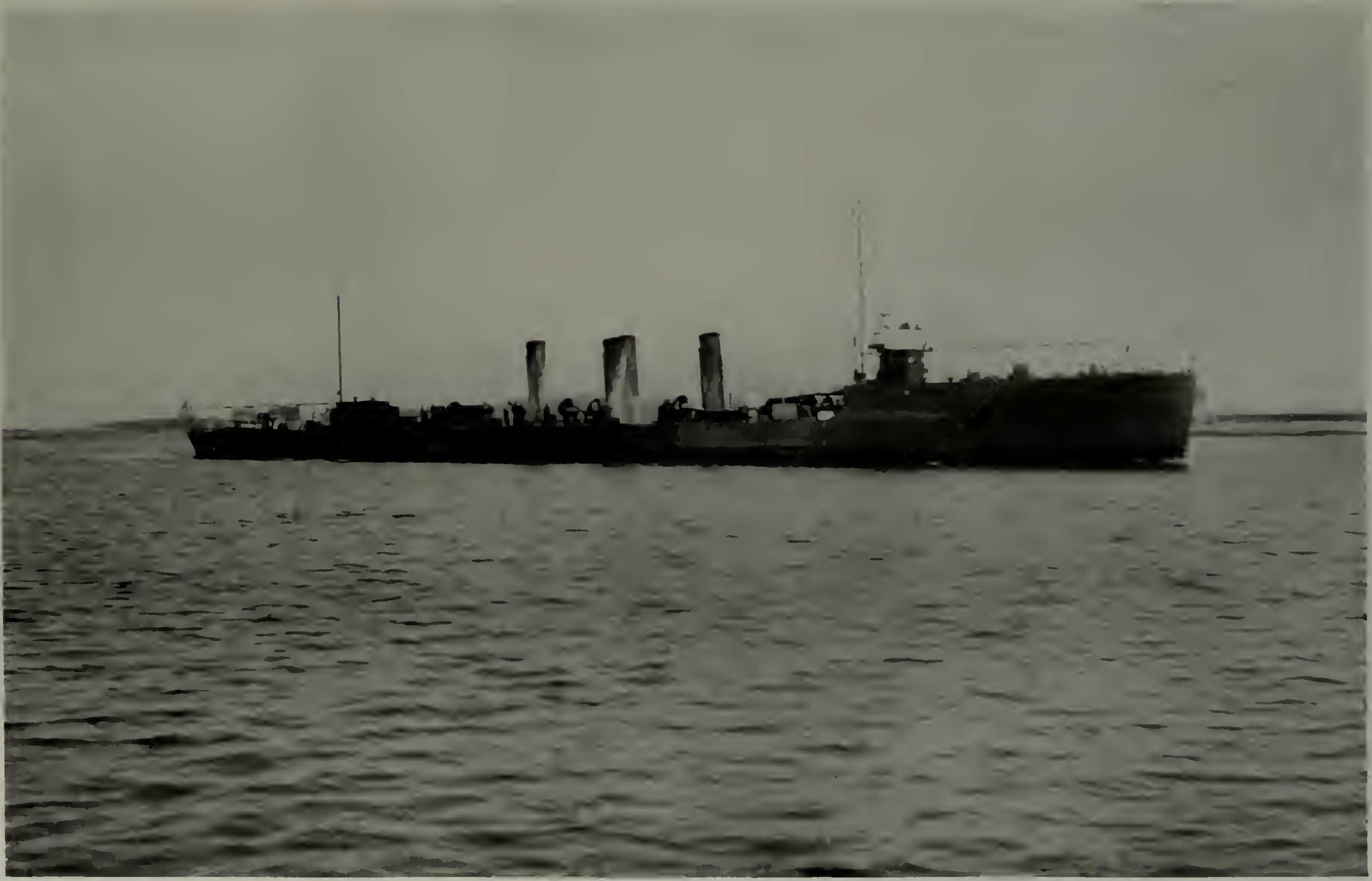
DRAYTON (Torpedo Boat Destroyer)

Displacement, 742 tons. Length, 289 feet. Beam, 26 feet 1½ inches. Draft, 8 feet 4 inches. Horsepower, 15,524 (three Parsons turbines). Speed at trial (mean), 30.83 knots. Armament, five 3-inch guns and three 18-inch twin torpedo tubes. Complement, 4 officers, 79 men. Built by Bath Iron Works, Bath, Me., 1910. Photograph taken on trial, 1910, at 28.92 knots. Same class, Burrowes, Mayrant, Paulding, Perkins, Roe, Sterrett, Terry and Warrington.



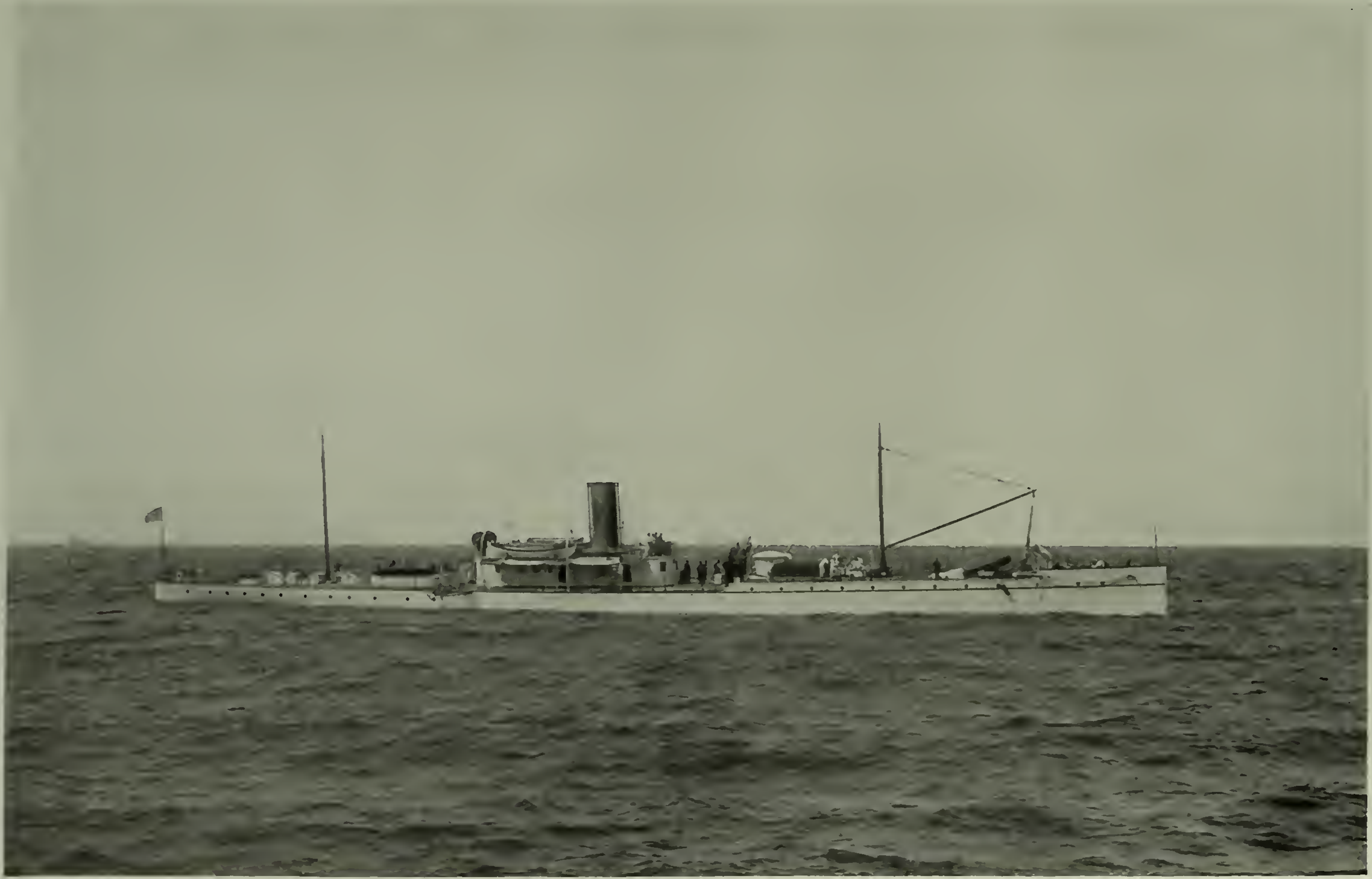
MAYRANT (Torpedo Boat Destroyer)

Displacement, 742 tons. Length, 289 feet. Beam, 26 feet 1½ inches. Draft, 8 feet 4 inches. Horsepower, 13,140 (two Zoelly turbines). Speed at trial (mean), 30.22 knots. Armament, five 3-inch guns and three 18-inch twin torpedo tubes. Complement, 4 officers, 79 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1911. Photograph taken, 1911.



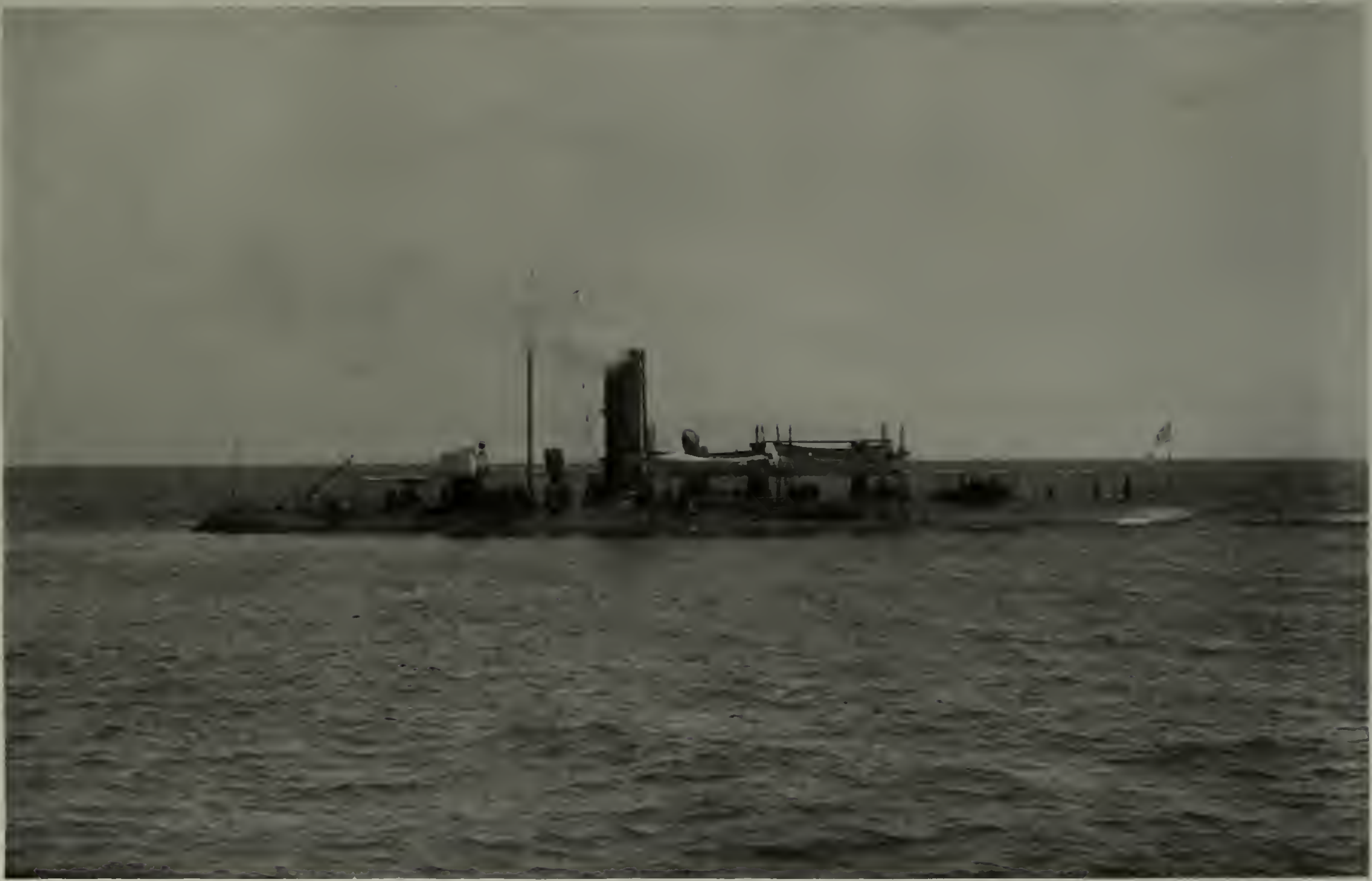
WALKE (Torpedo Boat Destroyer)

Displacement, 742 tons. Length, 289 feet. Beam, 26 feet 1½ inches. Draft, 8 feet 4 inches. Horsepower, 12,573 (two Curtis turbines). Speed at trial (mean), 29.78 knots. Armament, five 3-inch guns, three twin 18-inch tubes. Complement, 4 officers, 79 men. Built by Fore River Shipbuilding Co., Quincy, Mass., 1911. Photograph taken, 1911.



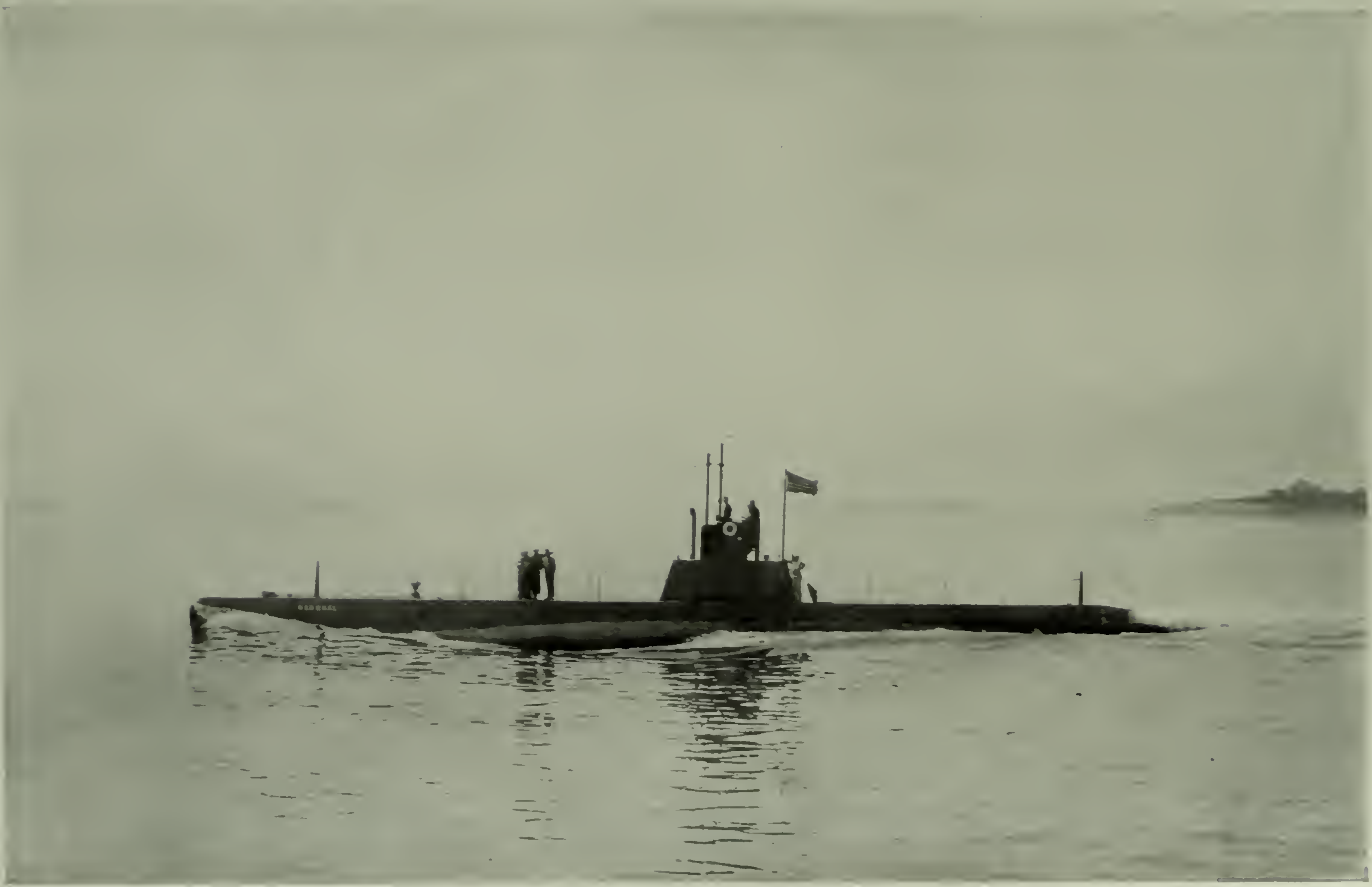
VESUVIUS (Dynamite Gunboat)

Displacement, 930 tons. Length, 252 feet 4 inches. Beam, 26 feet 6½ inches. Draft, 10 feet 7 inches. Horsepower, 3,975. Speed at trial (mean), 21.65 knots. Complement, 4 officers, 31 men. Built by Wm. Cramp & Sons Co., Philadelphia, Pa., 1890. Photograph taken, 1891. Now fitted as a torpedo practice vessel.



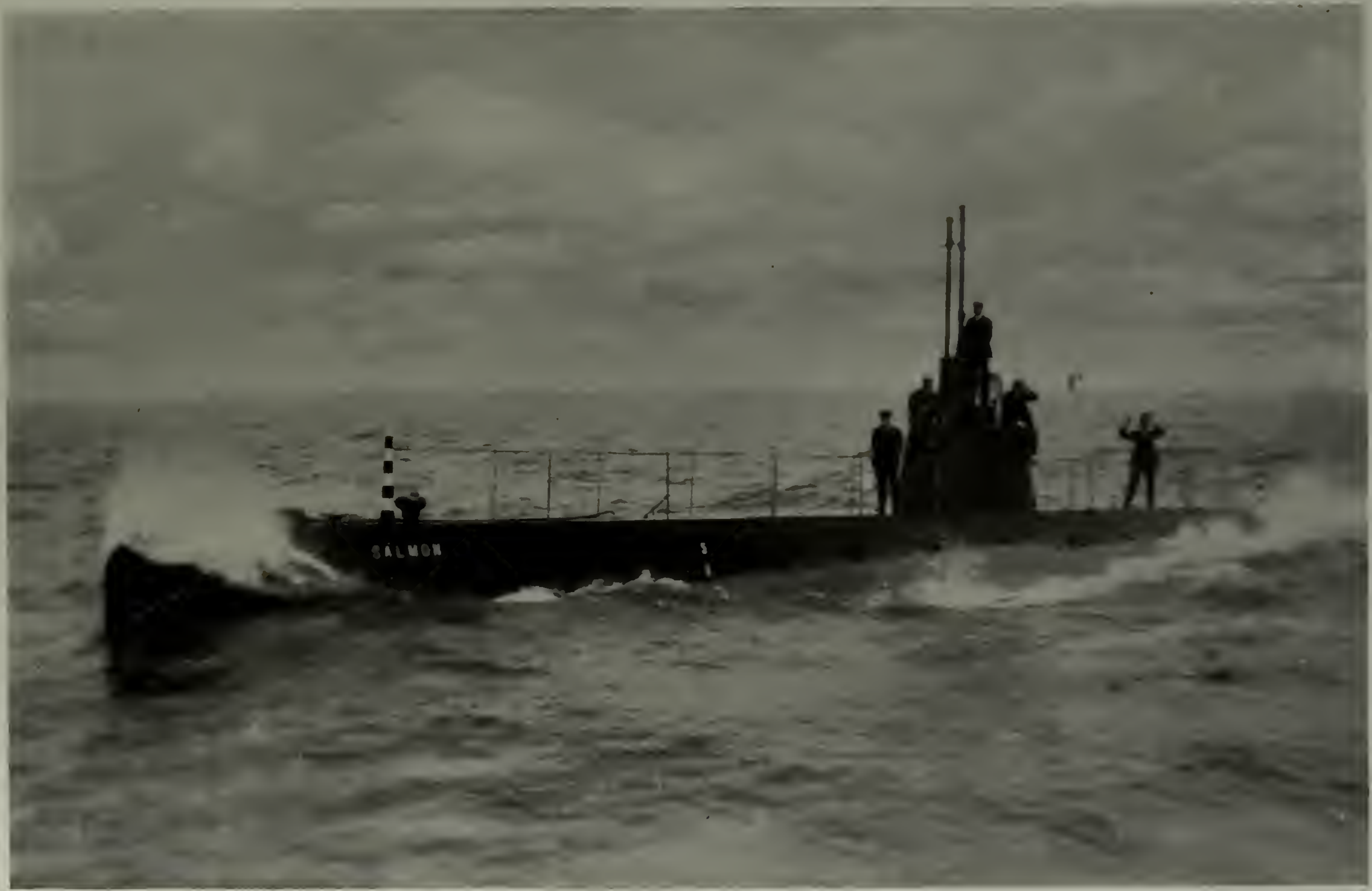
KATAHDIN (Armored Ram)

Displacement, 2,155 tons. Length, 250 feet, 9 inches. Beam, 43 feet 5 inches. Draft, 15 feet. Horsepower, 5,068. Speed at trial (mean), 16.11 knots. Complement, 7 officers, 90 men. Built by Bath Iron Works, Bath, Me., 1893. Photograph taken, 1896. Used as a target in 1911.



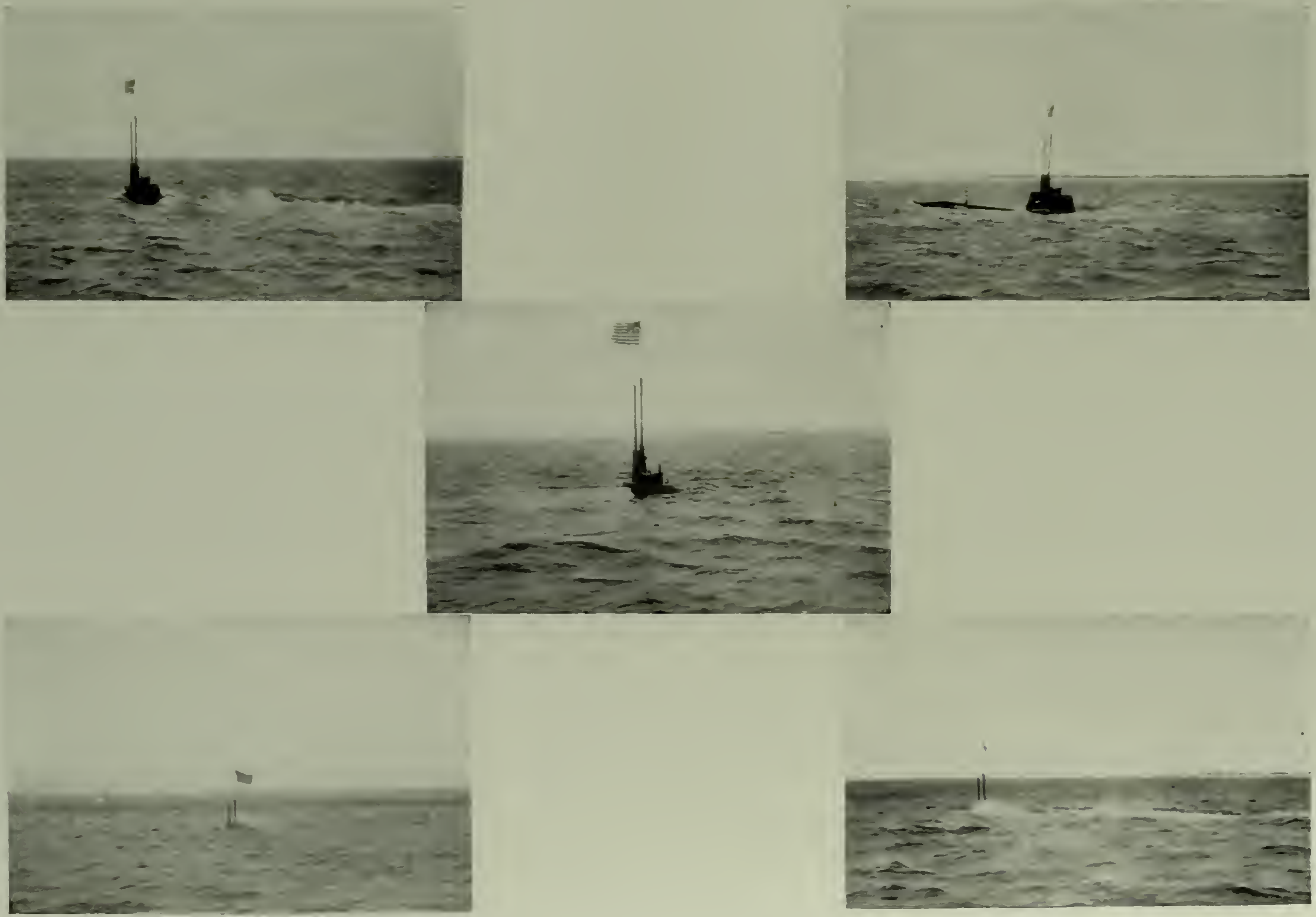
NARWHAL (Submarine Torpedo Boat)

Contractor, The Electric Boat Co., New York. Built by Fore River Shipbuilding Co., Quincy, Mass., 1909. The submarines are now designated by numbers only, the Narwhal being D.—1.



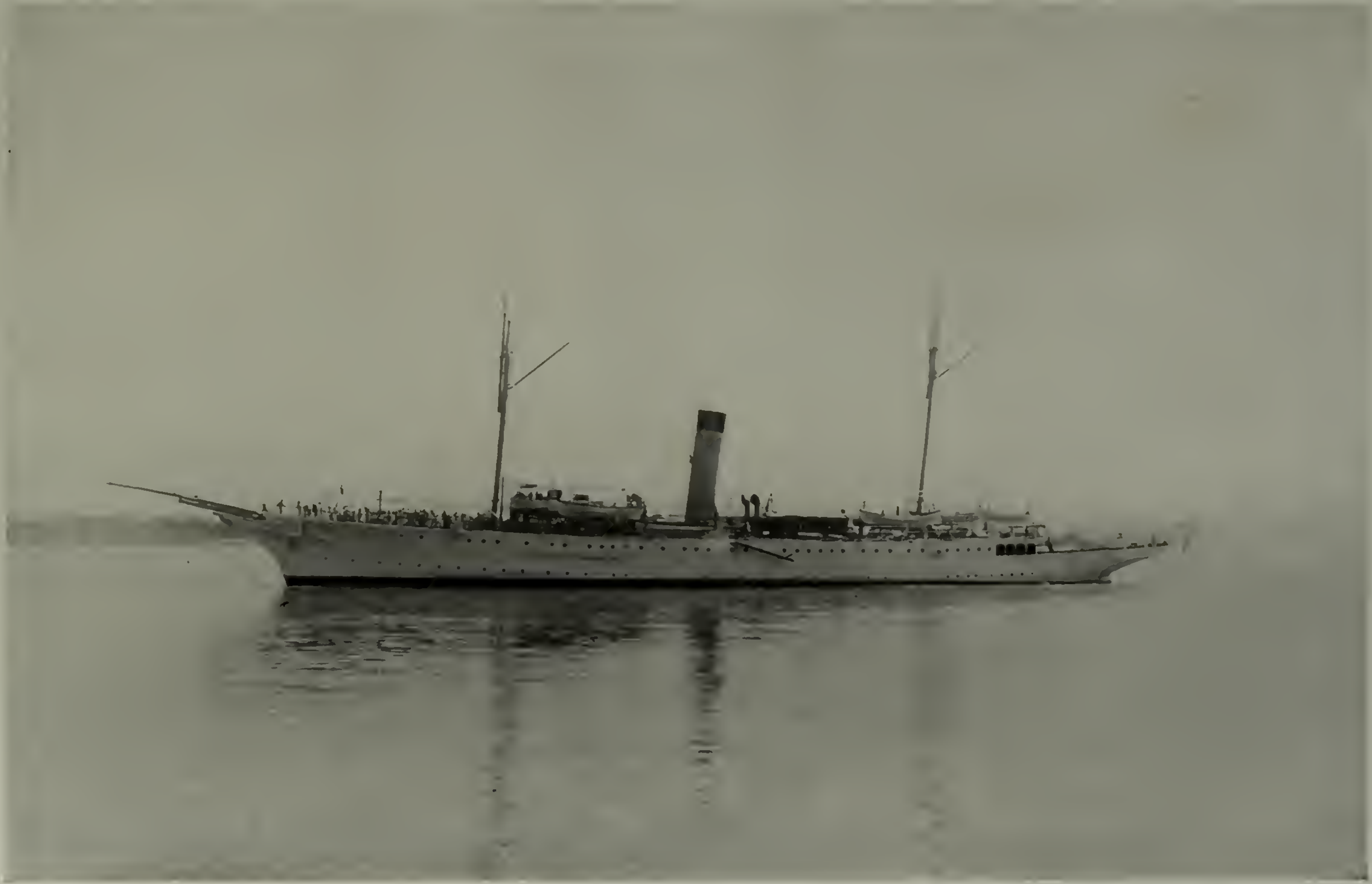
SALMON (Submarine Torpedo Boat)

Contractor, The Electric Boat Co., New York. Built by Fore River Shipbuilding Co., Quincy, Mass., 1910.—Now D.—3.



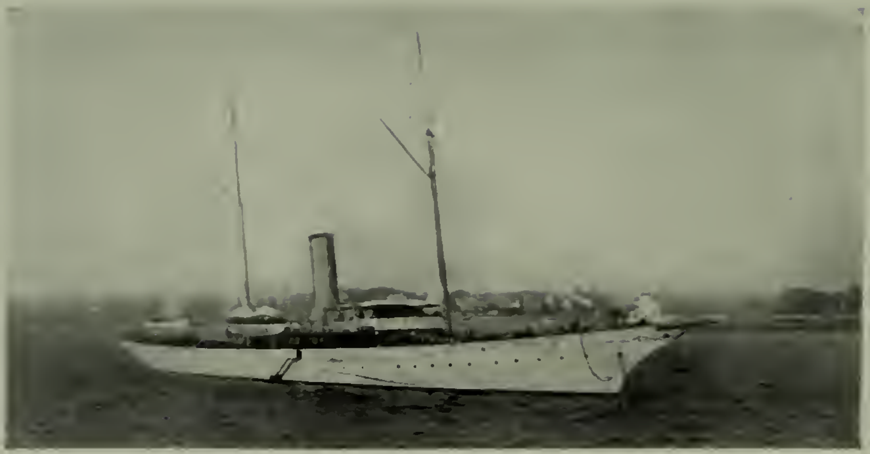
A SUBMARINE SUBMERGING

Photograph No. 1. The boat is stationary, water having been admitted to the tanks until the boat has a buoyancy of only about 700 lbs. If the boat is started ahead with the diving rudder at zero, she will rise as shown in No. 2. On operating the diving rudder, the stern is raised and the bow depressed, and the boat starts to go under as in No. 3. No. 4 shows the boat under and still going down, while in No. 5 she is running at a constant depth with periscopes only out of water. In this position the boat is navigated by observations taken through the periscopes, which are in the small towers projecting above the water.



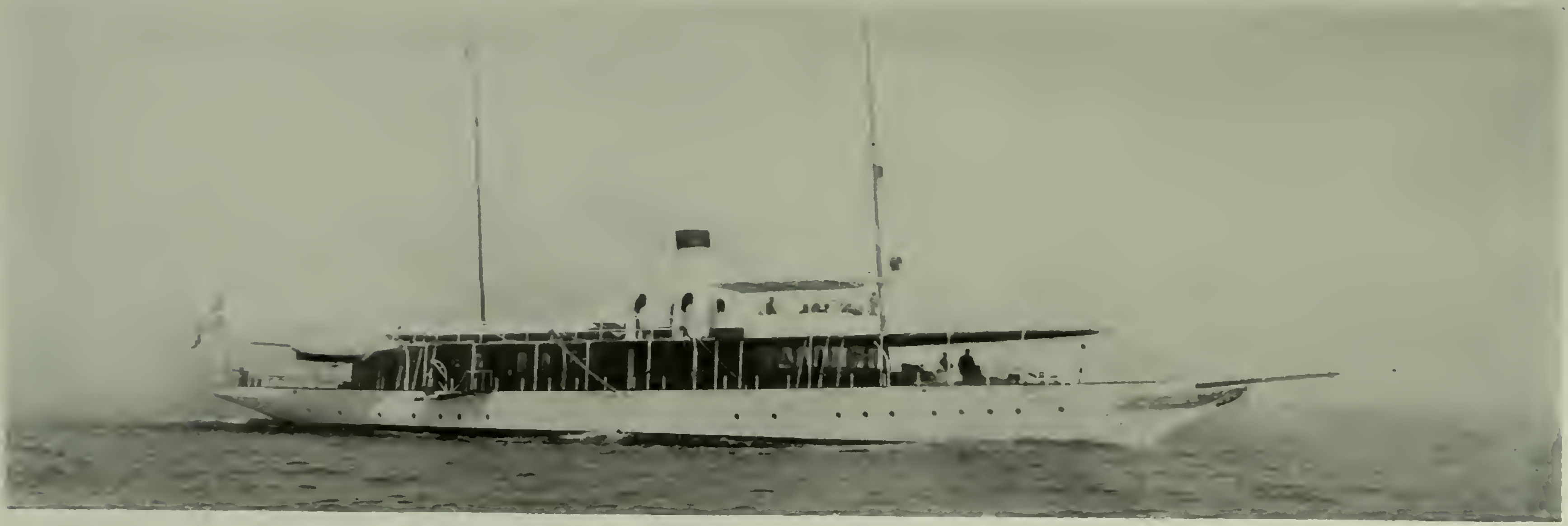
MAYFLOWER (Converted Yacht)

Displacement, 2,690 tons. Length, 273 feet. Beam, 36 feet. Draft, 17 feet 4 inches. Horsepower, 4,600. Speed, 16.8 knots. Armament, six 6-pounders. Complement, 8 officers, 166 men. Built by J. & G. Thompson, Clydebank, Scotland, 1896. Photograph taken, 1903. Used as President's yacht.



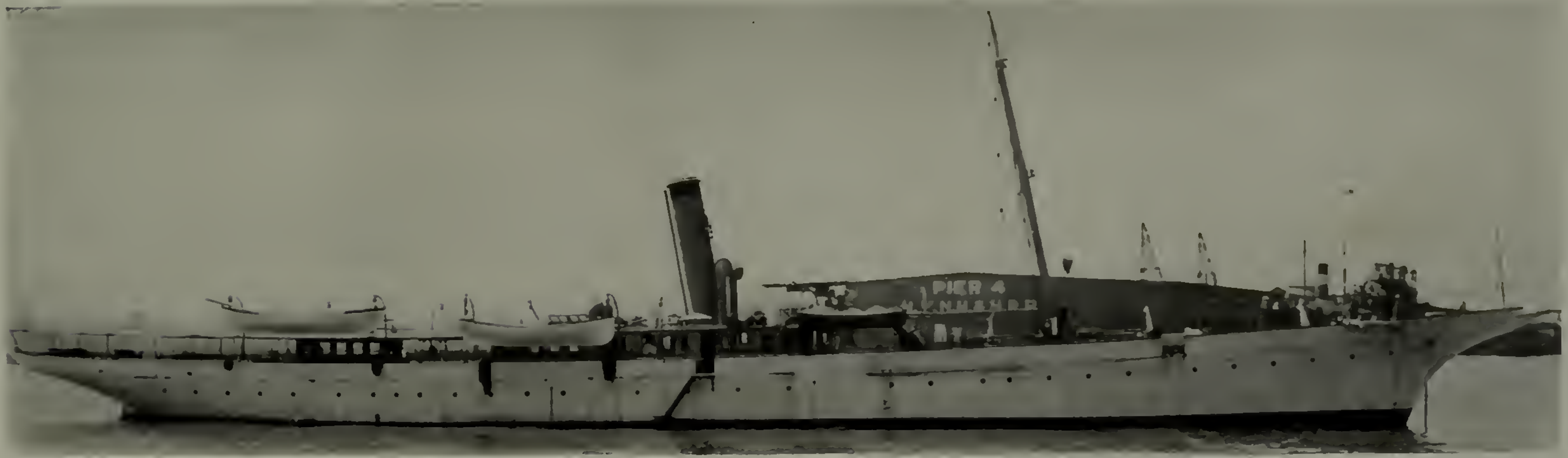
SYLPH (Converted Yacht)

Displacement, 152 tons. Length, 123 feet 8 inches. Beam, 20 feet. Draft, 7 feet 6 inches. Horsepower, 550. Speed, 15 knots. Complement, 3 officers, 28 men. Built by John Roach, Chester, Pa., 1898. Photograph taken, 1909.



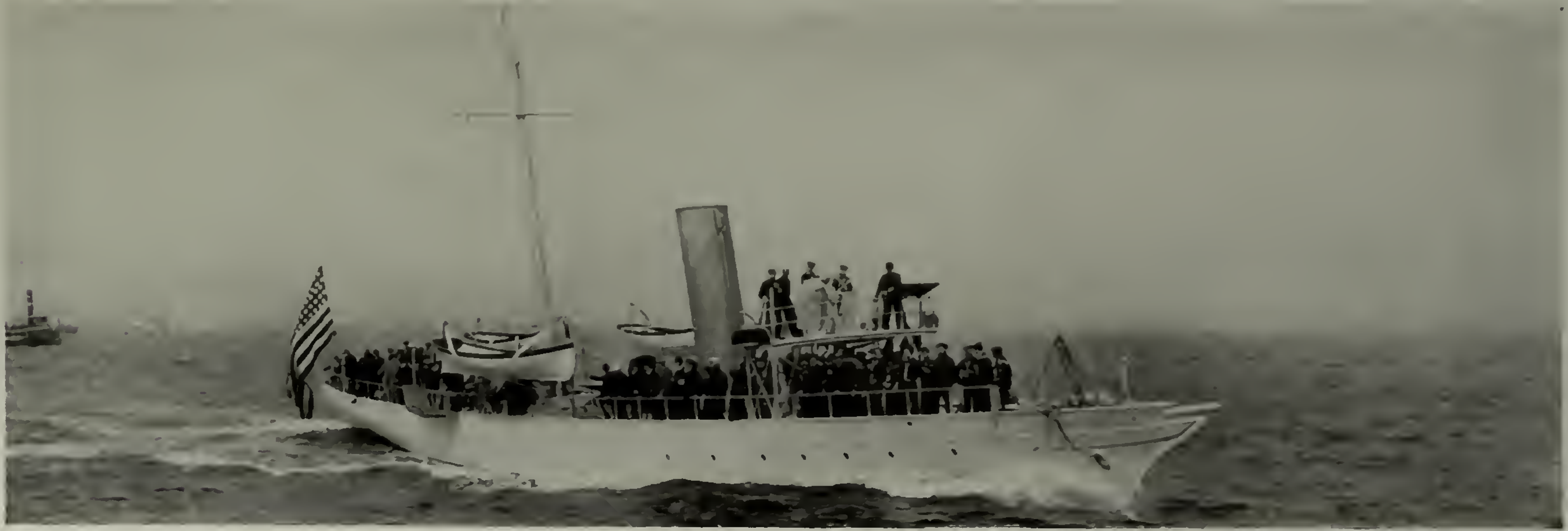
SCORPION (Converted Yacht)

Displacement, 775 tons. Length, 212 feet 9 inches. Beam, 28 feet 1 inch. Draft, 11 feet. Horsepower, 2,800. Speed, 17.85 knots. Armament, under 4-inch ten. Complement, 7 officers, 80 men. Built by J. N. Robins, So. Brooklyn, N. Y., 1896. Photograph taken, 1902. Used as station ship at Constantinople, 1911.



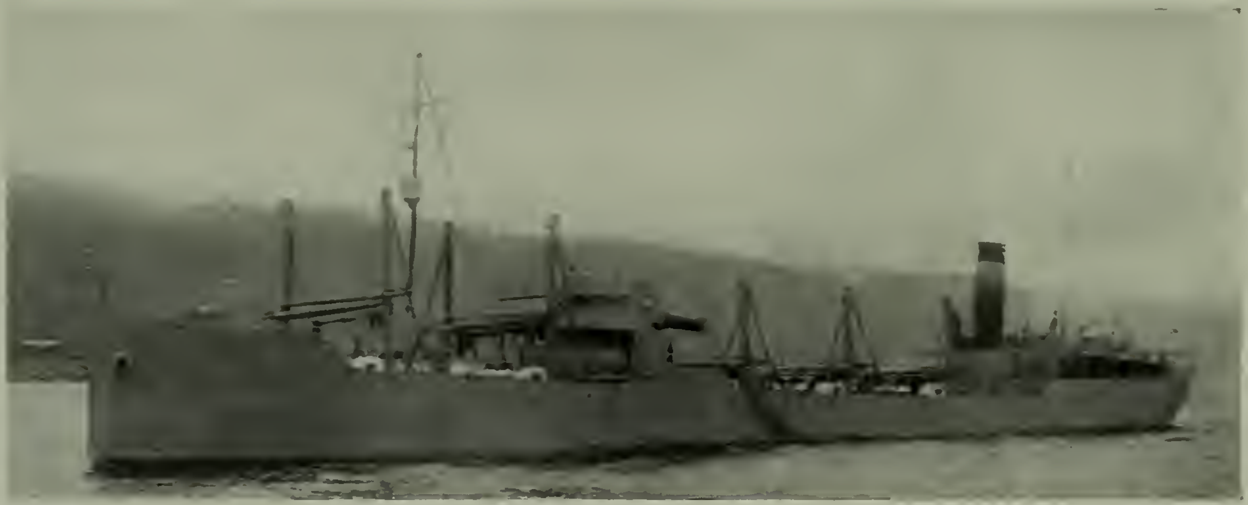
GLOUCESTER (Converted Yacht)

Displacement, 786 tons. Length, 204 feet. Beam, 27 feet 2 inches. Draft, 12 feet. Horsepower, 2,000. Speed, 17 knots. Armament, under 4-inch ten. Complement, 9 officers, 70 men. Built by Neafie & Levy, Philadelphia, Pa., 1891. Photograph taken, 1908. Participated in battle of Santiago, 1898. Assigned to New York Naval Militia, 1909.



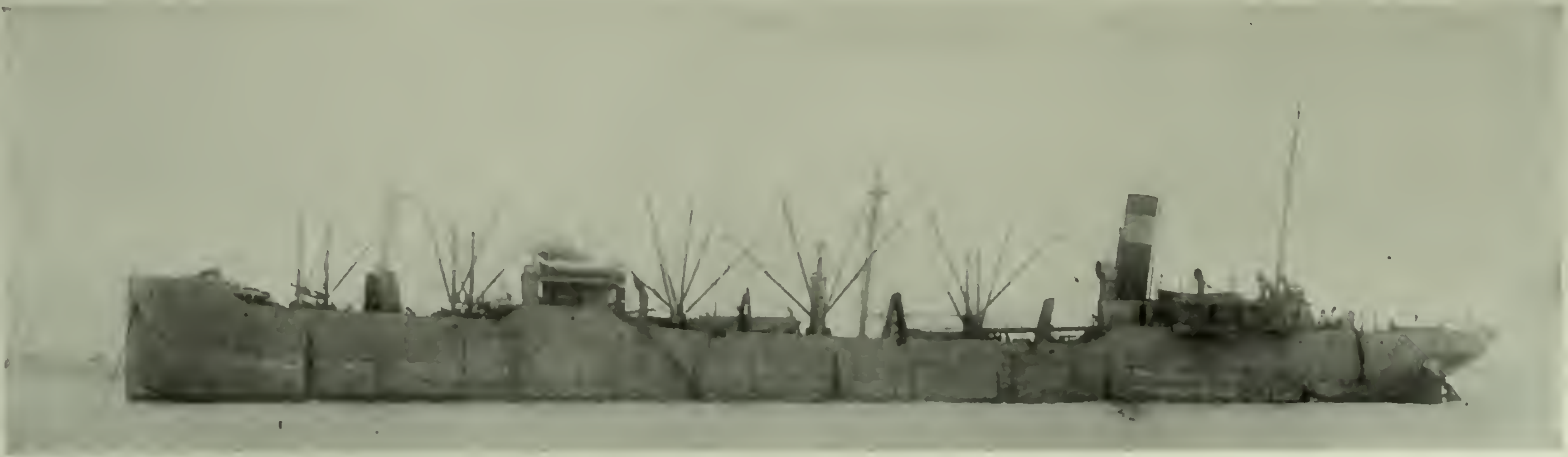
AILEEN (Converted Yacht)

Displacement, 192 tons. Length, 120 feet. Beam, 20 feet. Draft, 8 feet. Horsepower, 500. Speed, 14 knots. Armament, one 3-pounder, two 1-pounders. Built by John Roach, Chester, Pa., 1896. Assigned to Rhode Island Naval Militia, 1910. Photograph taken, 1899.



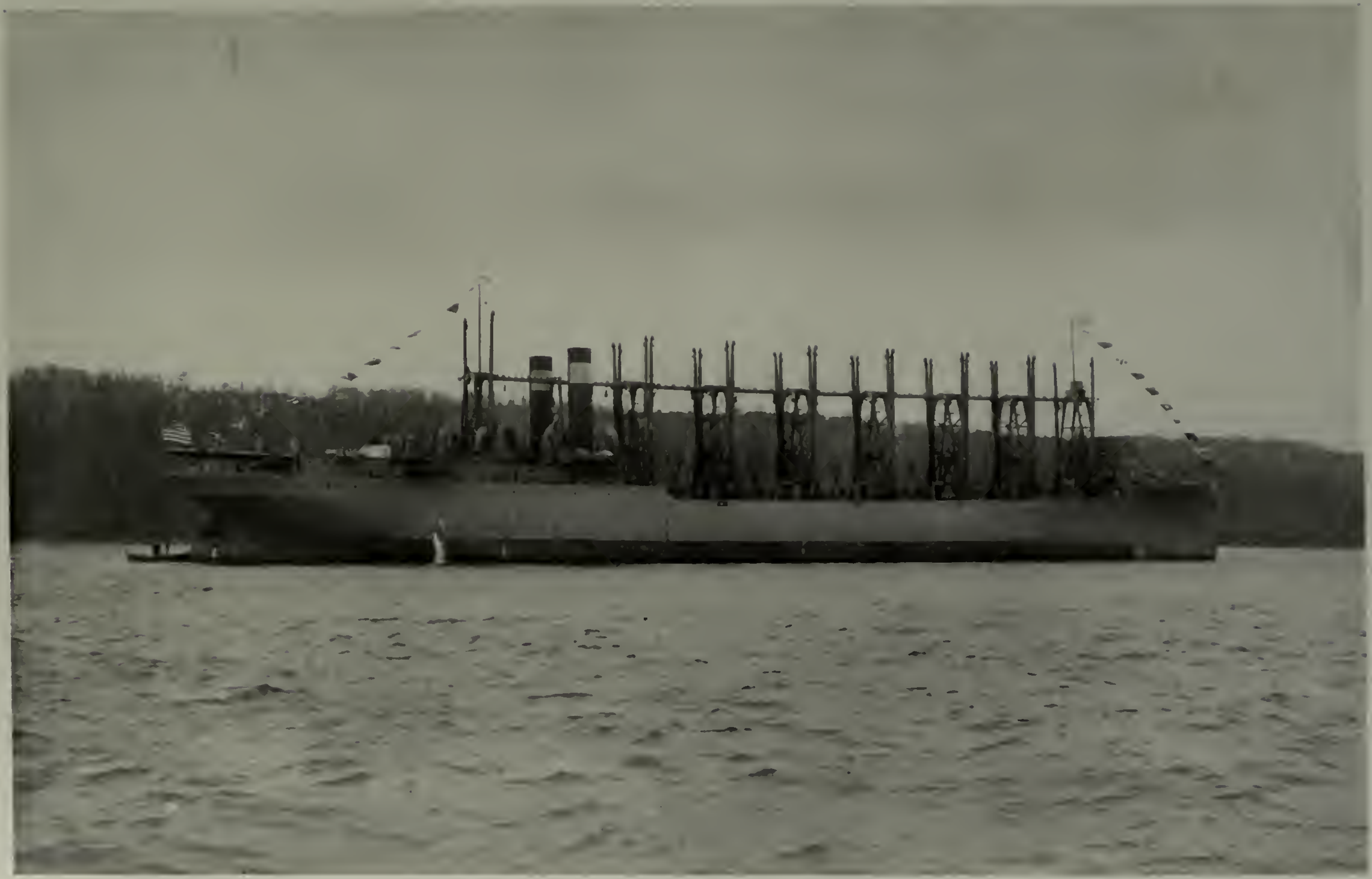
HECTOR (Collier)

Displacement, 11,230 tons. Length, 385 feet. Beam, 53 feet. Draft, 24 feet 8 inches. Horsepower, 3,921. Speed, 12.87 knots. Complement, 11 officers, 71 men (merchant crew). Built by Maryland Steel Co., Sparrows Point, Md., 1909. Photograph taken, 1911.



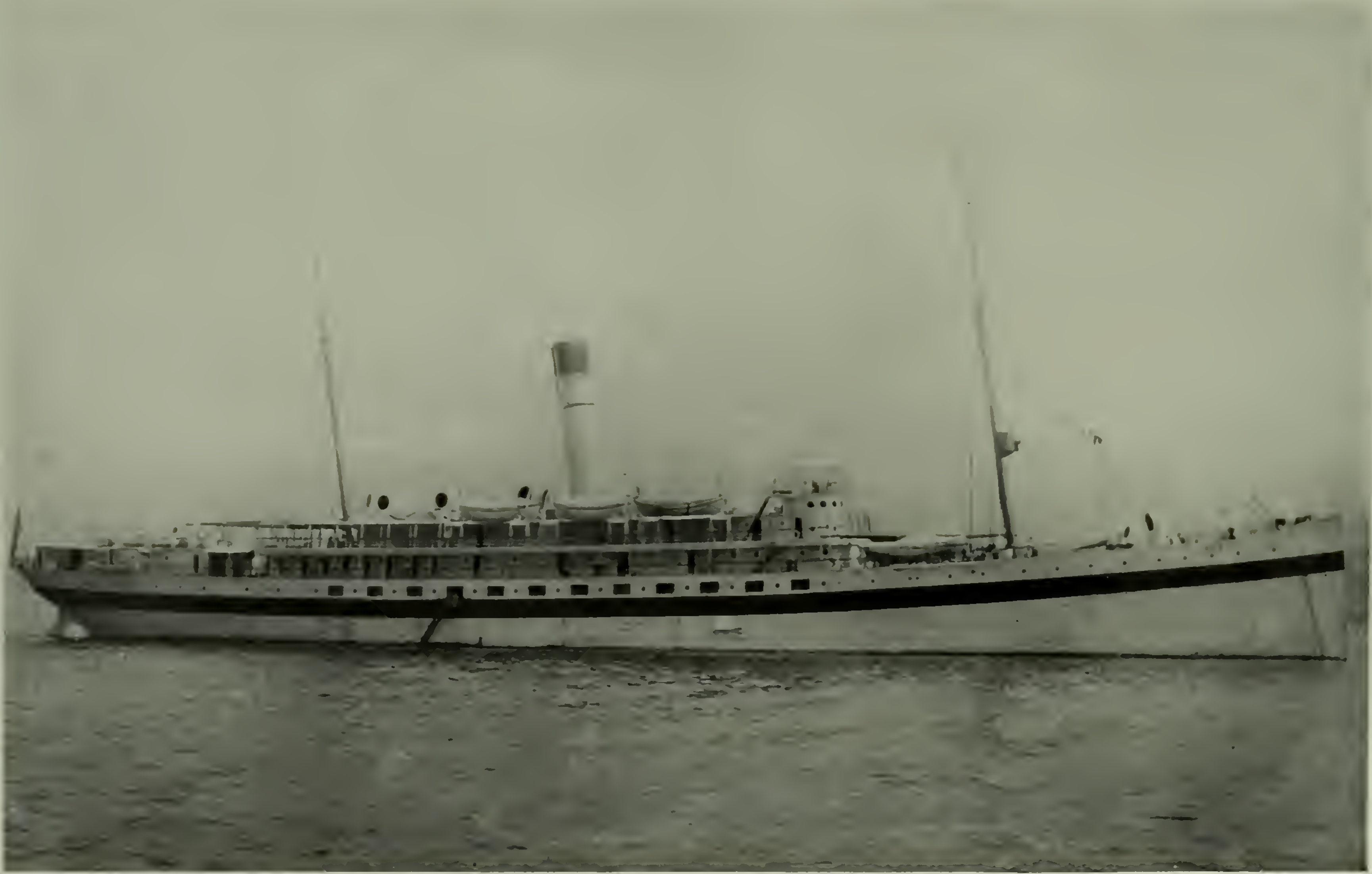
VULCAN (Collier)

Displacement, 11,230 tons. Length, 385 feet. Beam, 53 feet. Draft, 24 feet 8 inches. Horsepower, 3,736. Speed, 12.82 knots. Complement, 11 officers, 71 men (merchant crew). Built by Maryland Steel Co., Sparrows Point, Md., 1909. Photograph taken, 1911.



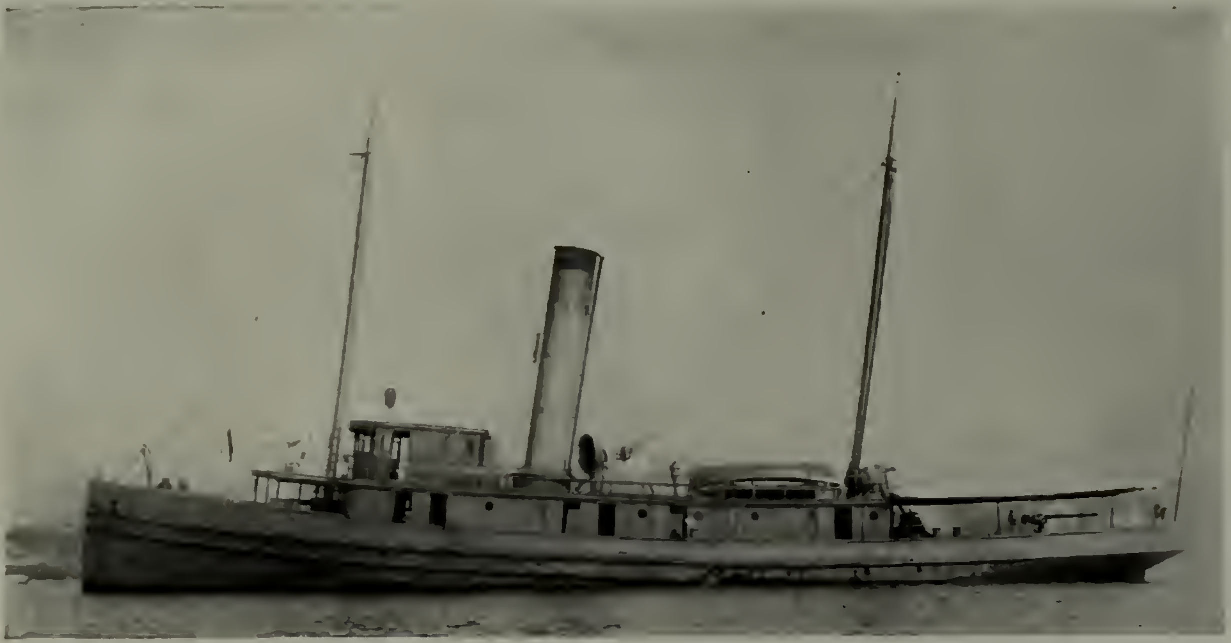
NEPTUNE (Collier)

Displacement, 19,531 tons. Length, 520 feet. Beam, 65 feet. Draft, 27 feet 7 inches. Horsepower, 5,409 (Westinghouse-Parsons turbines). Speed at trial (mean), 12.93 knots. . . . . Complement, 13 officers, 88 men (merchant crew). Built by Maryland Steel Co., Sparrows Point, Md., 1911. Photograph taken, 1911.



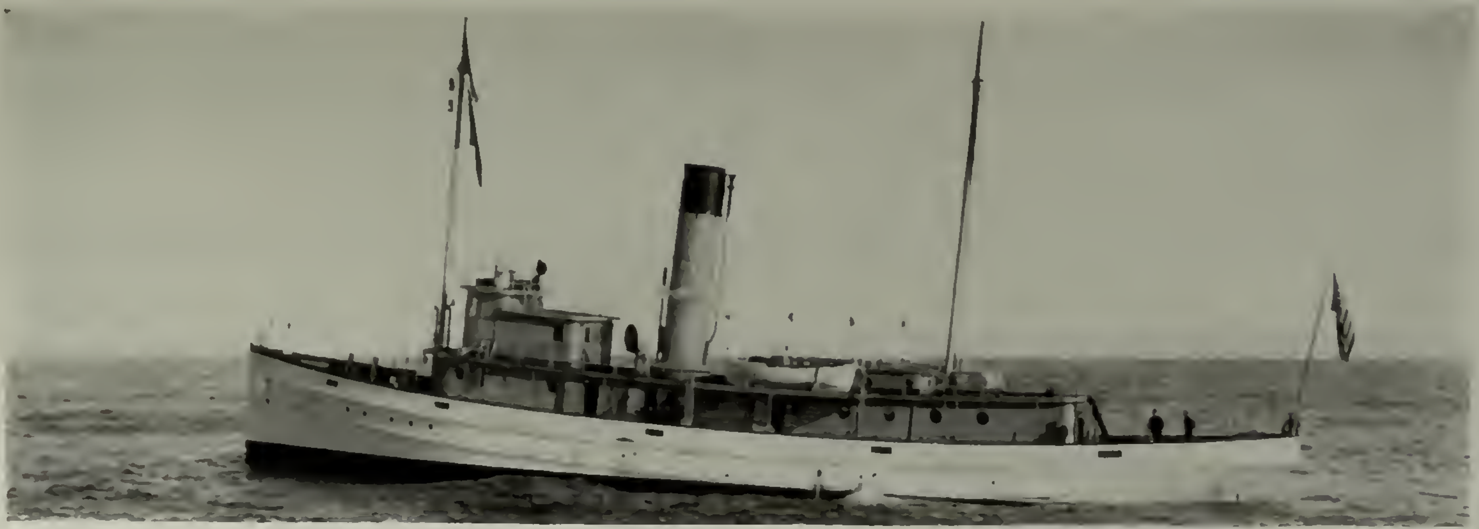
SOLACE (Hospital Ship)

Displacement, 5,700 tons. Length, 361 feet 2 inches. Beam, 44 feet. Draft, 22 feet. Horsepower, 3,200. Speed, 15 knots. Complement, 17 officers, 91 men (Merchant crew). Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1896. Photograph taken, 1898.



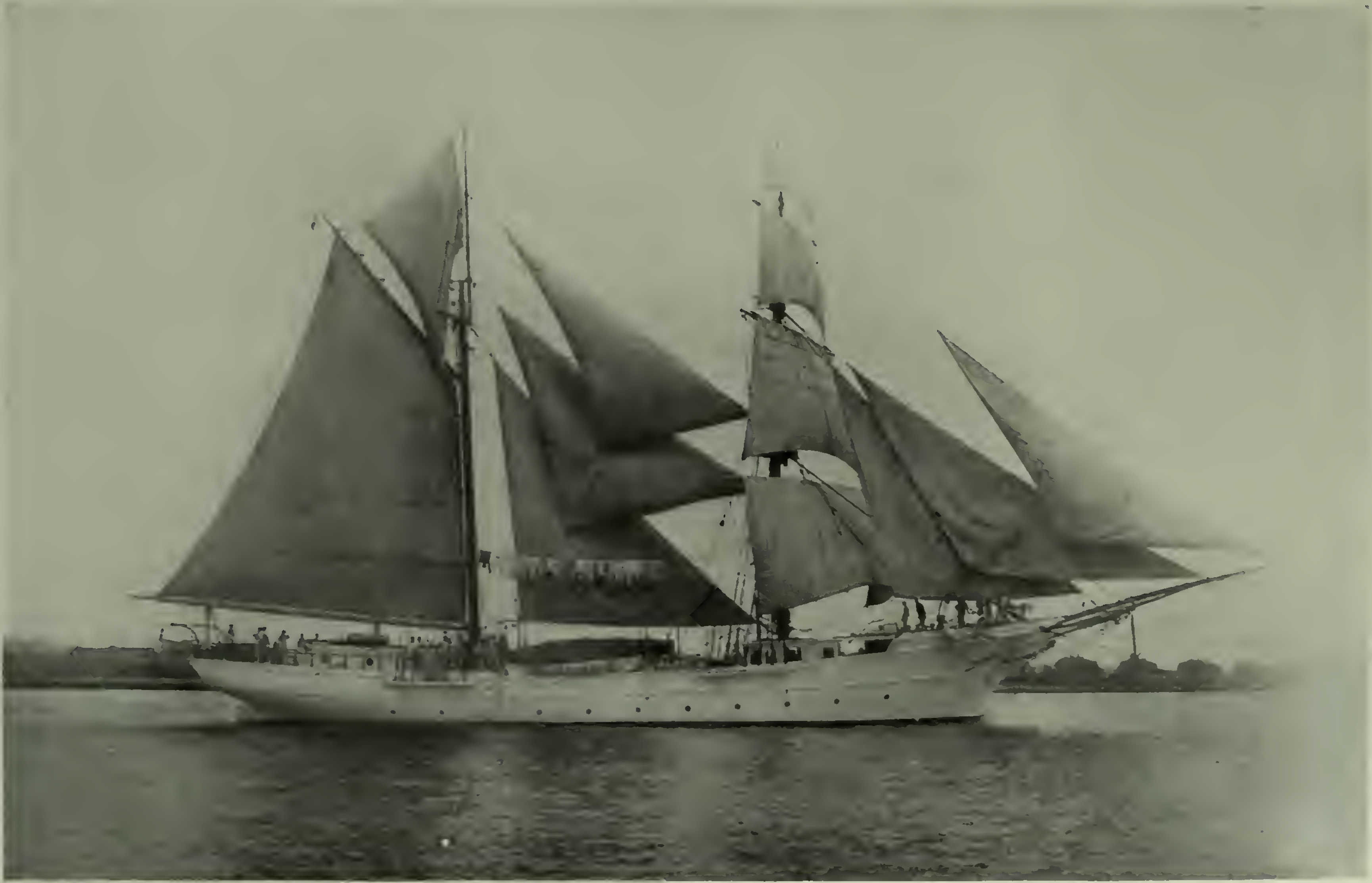
UNCAS (Tug)

Displacement, 441 tons. Length, 119 feet 3 inches. Beam, 25 feet. Draft, 12 feet. Horsepower, 750. Speed, 12 knots. Built by John H. Dialogue & Son, Camden, N. J., 1893. Photograph taken, 1898. Formerly W. A. Luckenbach.



PISCATAQUA (Tug)

Displacement, 854 tons. Length, 149 feet. Beam, 28 feet 7 inches. Draft, 12 feet. Horsepower, 2,000. Speed, 16 knots. Built by F. W. Wheeler & Co., West Bay City, Mich., 1897. Photograph taken, 1899. Formerly W. H. Brown.



BOXER (Training Ship)

Displacement, 346 tons. Length, 108 feet. Beam, 29 feet 9 inches. Draft, 9 feet 2 inches. Built by Navy Yard, Portsmouth, N. H., 1905. Photograph taken, 1906.

THE UNITED STATES REVENUE-CUTTER SERVICE

By

CAPTAIN PRESTON H. UBERROTH, R. C. S.

The United States Revenue-Cutter Service, the Strong right arm of the Treasury, owes its existence to that matchless organizer, Alexander Hamilton, who, after the freedom of the American Colonies had been won through the war of the Revolution, the Continental Navy disbanded and the country had returned to a peace basis, recommended the construction of a number of small vessels to patrol the coast "for the security of the revenue against contraband."

From the beginning of the new era, there was no sea force available for the protection of our extensive seacoast and the maritime interests of the newly constituted nation until the organization of the Revenue-Cutter Service, under an act of the First Congress, Second Session, approved by President Washington on August 4, 1790. By the following year ten vessels, with a crew of ten men each, had been built and made ready for duty, and during a period of six years and eleven months the vessels of this service constituted the only armed force afloat belonging to the young republic, and were actively engaged in maintaining an effective patrol along the extensive but thinly populated coastline of the country.

It is thus seen to be one of the oldest distinct branches of the Government, and with its dual functions, formed the nucleus of the Revenue-Cutter Service of to-day. Many of its officers came from the ships which had served in the Continental Navy, and the first commission granted by President Washington to any officer afloat was issued to Captain Hopley Yeaton, of New Hampshire, in the United States Revenue-Cutter Service. This officer had served as a lieutenant on the frigates *Raleigh* and *Dean* of the Continental Navy.

The duties of the Service consist in the enforcement of almost every statute bearing upon the maritime interests of the nation. Embraced among these are the protection of the customs revenue, including the right of search of merchantmen arriving within the United States, or within four leagues thereof, if bound to a port in the United States, the suppression of piracy and mutiny, the search for wrecked and missing vessels, the enforcement of the neutrality, navigation, quarantine and anchorage laws, the protection of life and property at regattas, of the seal and other fisheries in the waters of the Alaskan territory, of the sponge fishing industry in the Gulf of Mexico, the destruction or removal of derelicts and other menaces to navigation lying in the track of commerce, the assistance to distressed navigators, the rendering of aid to vessels in distress, the construction and inspection of life-saving stations and the drilling of the life-saving crews.

The activity demanded on the part of officers and men for the effective performance of these manifold and often onerous duties is manifest to all, for during the months of a rigorous winter, when vessels must keep the sea, there are no "piping times of peace" for the cordon of seaworthy ships strung along our shores from the rock-bound coast of Maine to the arid sands of the southernmost peninsula.

One of the most important duties of the Service is the relief of vessels in distress. This includes assistance rendered to maritime interests in saving from destruction property wrecked on the coast, and also the saving of lives jeopardized in disabled or stranded vessels. The President designates certain cutters each year, during the stormy wintry months from December to April, to patrol the coastline in search of vessels in distress. In the performance of this duty thousands of persons have been rescued from the perils of the sea and property of the value of millions of dollars has been saved. The work of assisting the commercial and maritime interests of the country is not confined to the Atlantic, the Pacific and the Gulf coasts, and to the Great Lakes, but extends to the Bering Sea and the Arctic Ocean. In the Alaskan region the laws are upheld and enforced, the seal and other fisheries are protected and the vessels of the Arctic whaling fleet are aided when help is needed.

To the usual perils that beset the mariner are added the uncharted derelicts and other dangers in the track of vessels. The Revenue-Cutter Service is charged with the destruction of these menaces to navigation, and a special derelict destroyer has been constructed for the purpose of locating and removing these dangers. The United States Government is the first to provide such a ship for keeping the adjacent marine highways clear for the ships of all nations.

From the date of the establishment of the Life-Saving Service, commissioned officers of the Revenue-Cutter Service have been detailed to duty in connection with it, and its efficiency is largely due to the efforts of these officers. Under the direction of the General Superintendent of the Life-Saving Service, they drill the crews of life-saving stations, superintend the construction of the surf-boats and life-boats, as well as the boat-houses and living quarters of the men, and investigate cases of loss of life within the scope of life-saving operations. They have given to that Service a number of inventions and appliances for the furtherance of its humane work.

The Service co-operates with the Navy, by direction of the President, and in time of war the duties of the Revenue-Cutter Service are self-evident. The history of the wars of the nation involves, in a large degree, the history of this Service, as its vessels and crews have formed an adjunct to the Navy in all its wars for the defense of the country. A few incidents will serve to show to some extent the character of this work.

In 1798 and 1799, during our troubles with France, the revenue cutter *Pickering* captured ten prizes in engagements with the French, and another cutter, the *Eagle*, captured five.

During the War of 1812, the first capture made was that of the British schooner *Patriot* by the revenue cutter *Jefferson*. The capture of fourteen British vessels with their guns, officers and men embodies the operation of the revenue cutters during this war.

In the Seminole War, the revenue cutters co-operated with both the Army and Navy and the value of their work in this war is emphasized in the report of the captain of the sloop-of-war *Vandalia* to the commanding officer of the squadron, when he says: "The prompt and ready co-operation with the Army has called forth the highest commendation from the Commanding Generals, who take occasion to eulogize the service rendered by the *Vandalia* and the revenue cutters."

Five revenue cutters were engaged in naval operations in the war with Mexico, and gave a good account of themselves in the attacks on Alvarado and Tabasco, and in co-operation with the blockading fleet off the Mexican coast.

When a naval force, under Commodore Wm. B. Shubrick was dispatched to Paraguay in 1858, the revenue cutter *Harriet Lane* formed a part of his squadron. In reporting to the Secretary of the Navy on the operations of the force under his command during this expedition, Commodore Shubrick expresses his sense of the skill and zeal with which the commanding officer of the *Harriet Lane* had used the very efficient vessel under his command.

The revenue cutters were actively engaged throughout the Civil War, both in naval engagements and on the various blockades, participating in the attack on Fort Hatteras, in the bombardment of Drewry's Bluff on the James River, in the reconnaissance of the batteries of Norfolk, and in the operations on Chesapeake Bay.

During the war with Spain, thirteen revenue cutters, carrying 61 guns, 98 officers and 562 enlisted men, co-operated with the Navy. Of these, 8 cutters, with 43 guns, 58 officers and 339 enlisted men were in Admiral Sampson's fleet on the Cuban blockade; 1 cutter, with 6 guns, 10 officers and 95 men were in Admiral Dewey's fleet at Manila and 4 cutters, with 12 guns, 30 officers and 128 men co-operated with the Navy on the Pacific Coast.

In addition to services rendered by vessels with the naval forces, there were seven others, carrying 10 guns, 33 officers and 163 men, with the Army, engaged in patrolling and guarding mine fields in various harbors, from Boston to Mobile and New Orleans.

At the battle of Manila, the *McCulloch* so efficiently performed the duties assigned by Admiral Dewey as to call forth his official commendation, and at the close of the engagement carried to Hong Kong the message which was to apprise the Government and the world of that glorious and signal victory won by our fleet on the opposite side of the globe.

It was during this war that the *Hudson* took part in the battle of Cardenas Bay. In this engagement, May 11, the revenue cutter *Hudson,* Lieutenant Frank H. Newcomb (now Captain Commandant, retired), commanding, sustained the fight against the gunboats and shore batteries of the enemy, side by side with the torpedo boat *Winslow,* and when an officer and part of the crew of the latter-named vessel had been killed and her commander wounded, rescued from certain destruction the vessel and the balance of her crew under a furious fire from the enemy's guns.

In recognition of this signal act of heroism, a gold medal of honor was awarded by Congress to the commander of the *Hudson,* a silver medal of honor to each of his officers and a bronze medal of honor to each member of his crew.

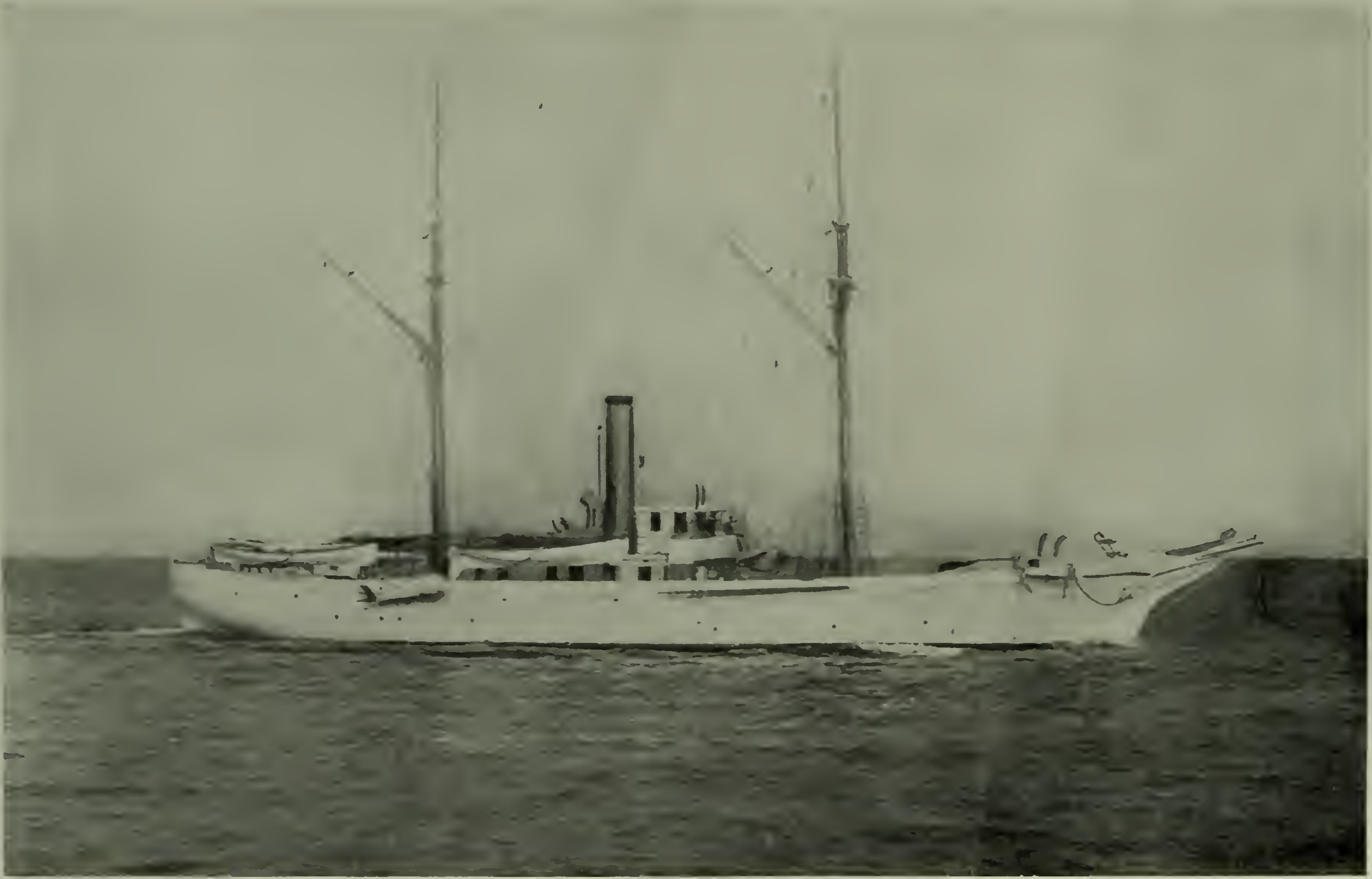
The commissioned officers and cadets on the active list number 242 and the warrant officers and enlisted men about 1,560. Commissioned officers have rank with officers of the Army and Navy, and receive the same benefits of retirement as are accorded to those officers.

The Service maintains a school, located at Fort Trumbull, New London, Connecticut, for the training of its young officers. Appointments to cadetships in the Service are made upon competitive examinations, which are open to young men between the ages of 18 and 24, possessing the requisite moral and physical qualifications.

Strict military training at the school, with a comprehensive technical course of three years, together with the necessary practical knowledge gained during annual cruises at sea in the practice ship, fits the cadet for his duties as an officer. Vacancies in the engineer corps are filled by original appointment of cadet engineers, the maximum age being 25½ years.

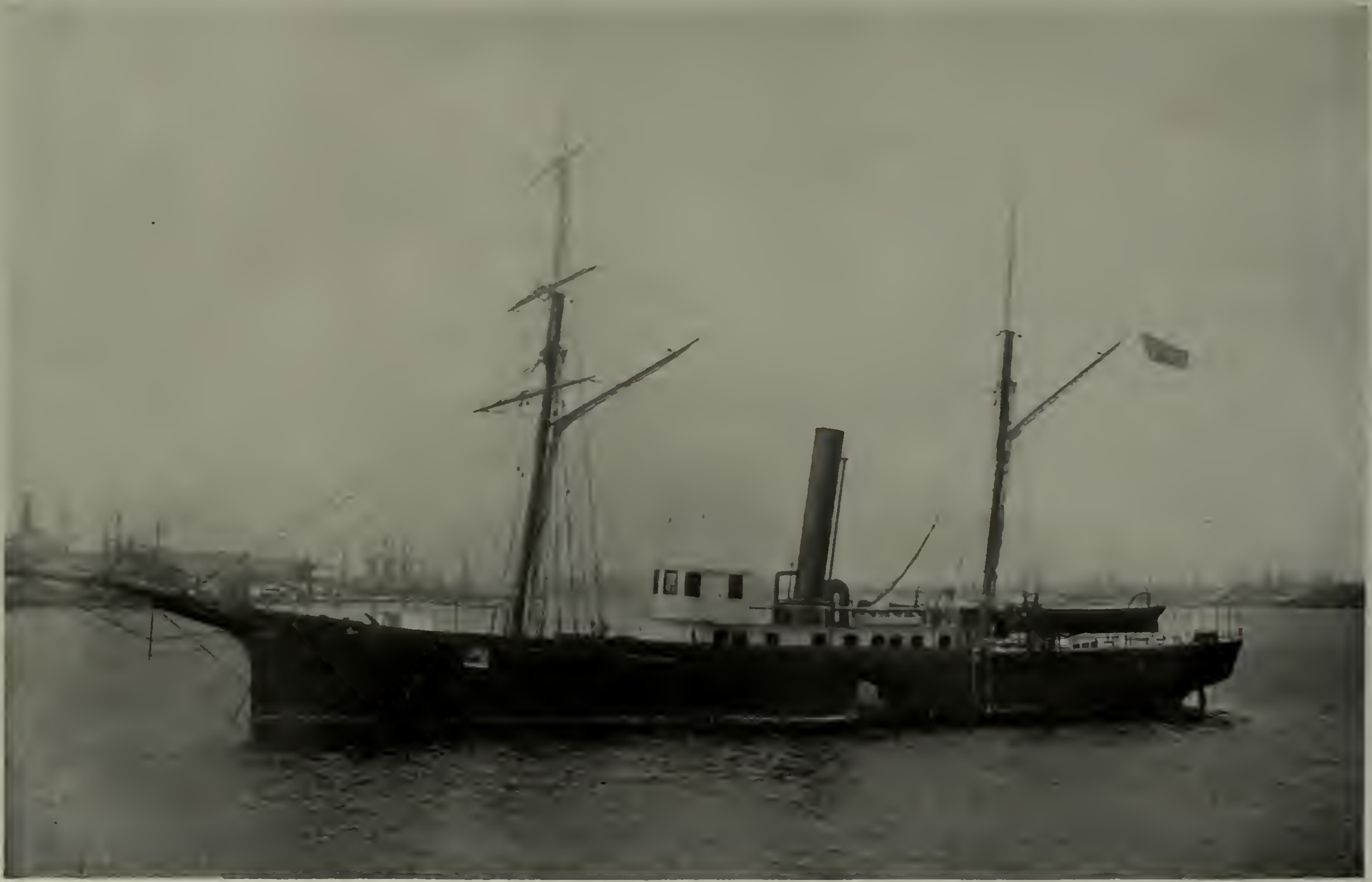
There are forty-seven vessels of various rates and tonnage, the largest being of 1,480 tons displacement.

"Semper Paratus" is the motto of the Service, and is inscribed on its standards. The officers and men live up to their standard, and their efforts and activities being always in the interest of the Government and the people, many times the annual expense for the maintenance of the Service is saved each year to the commercial interests of the country.



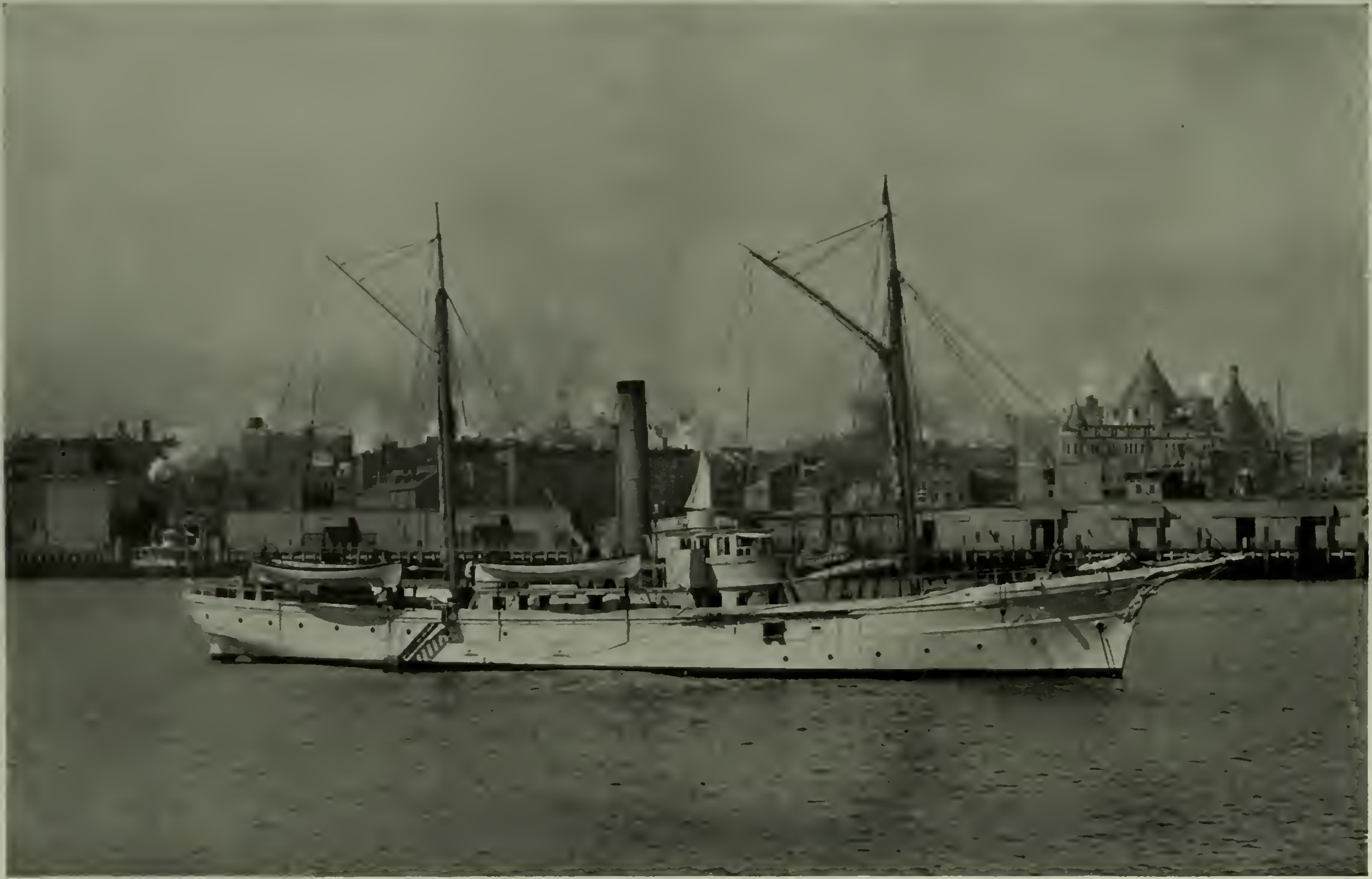
WOODBURY

Displacement, 500 tons. Length, 140 feet 6 inches. Beam, 28 feet 6 inches. Draft, 11 feet 4 inches. Horsepower, 330. Speed, 11 knots. Armament, one gun. Complement, 6 officers, 37 men. Built by J. W. Lynn & Son, Philadelphia, Pa., 1864. Photograph taken, 1905.



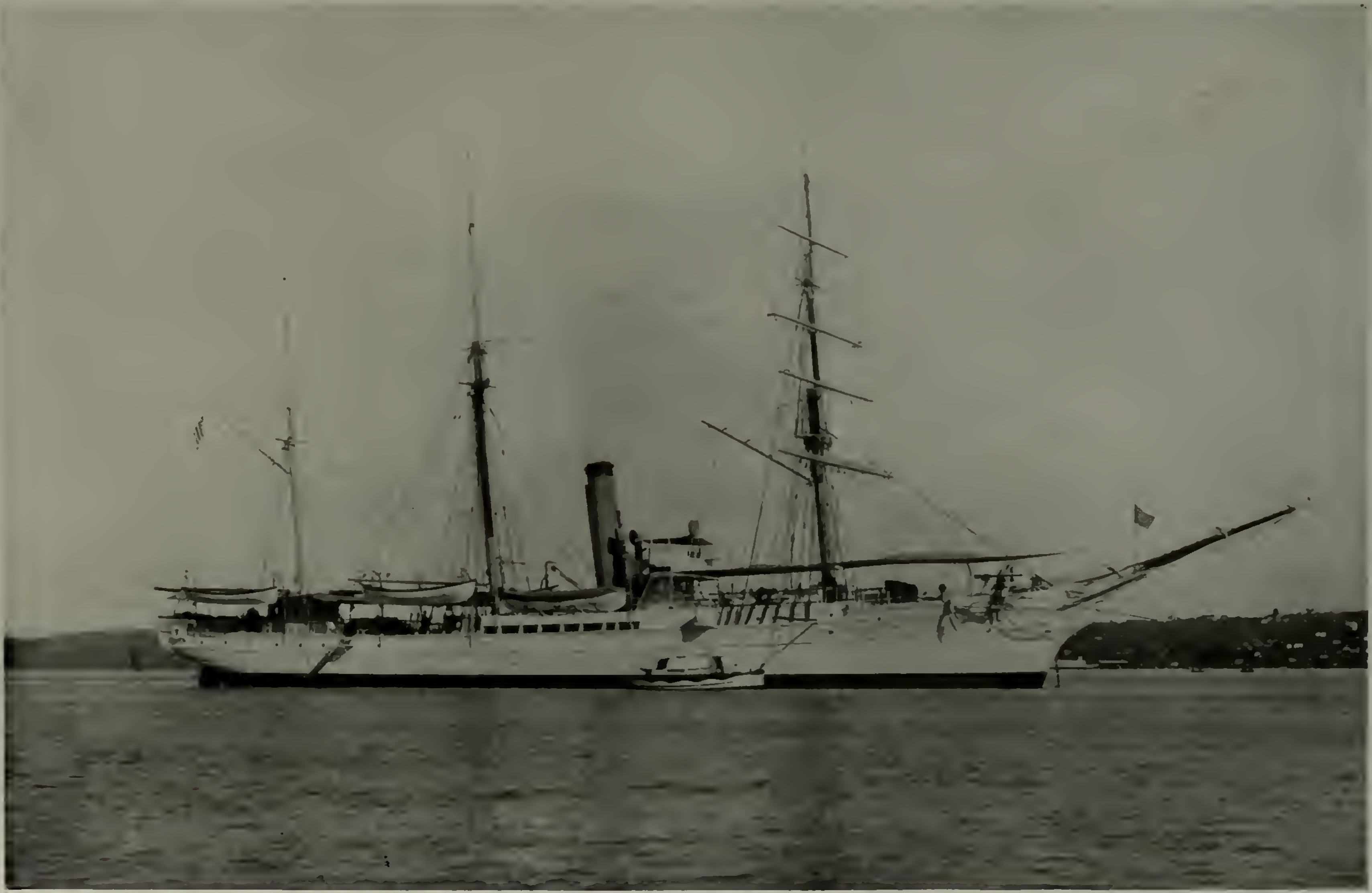
GALLATIN

Displacement, 250 tons. Length, 137 feet. Beam, 23 feet 1 inch. Draft, 8 feet. Horsepower, 350. Speed, 12 knots. Armament, two guns. Complement, 6 officers, 39 men. Built by David Bell, Buffalo, N. Y., 1871. Photograph taken, 1889. Wrecked on north shore of Massachusetts Bay in 1891.



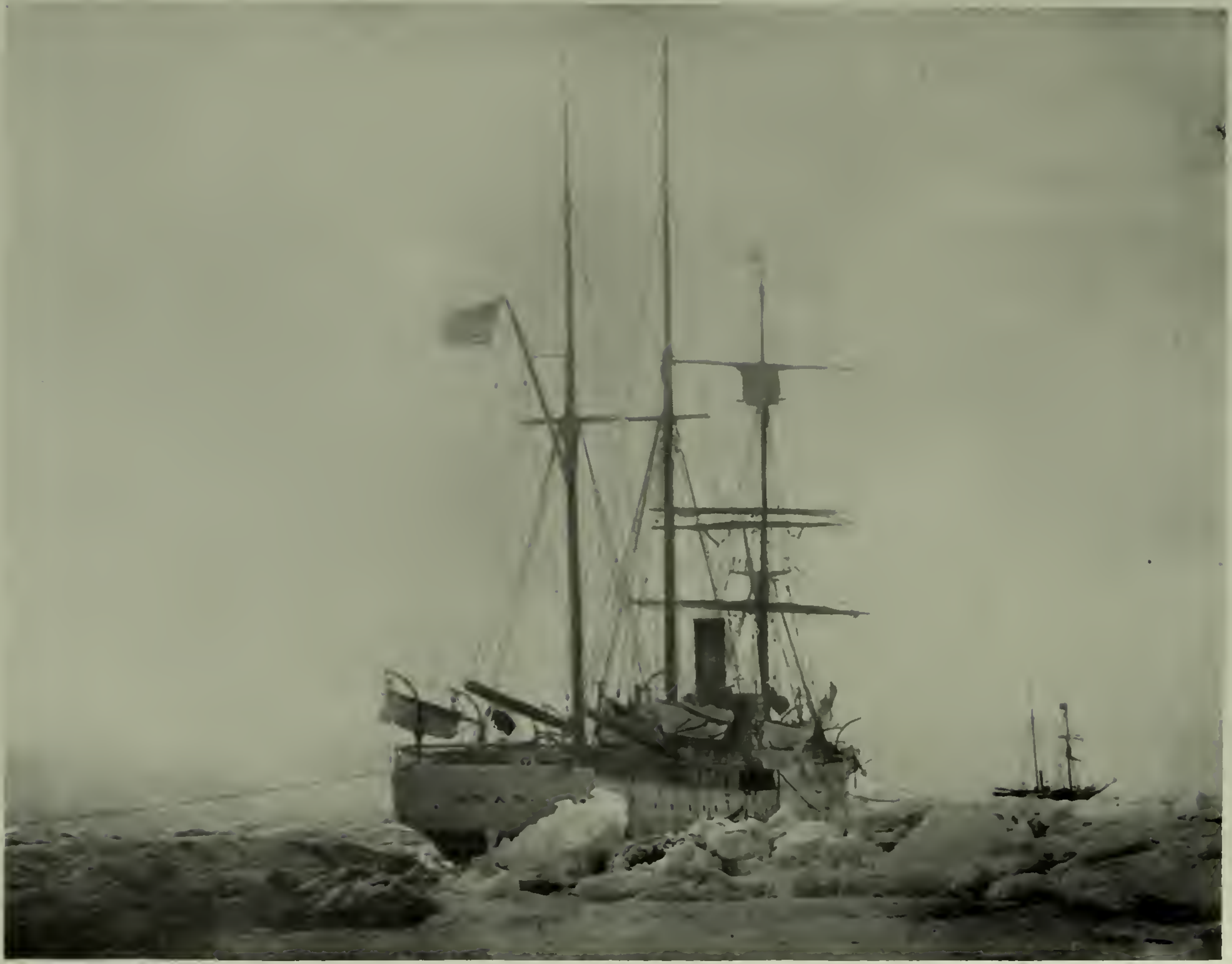
DALLAS

Displacement, 179 tons. Length, 140 feet. Beam, 21 feet 5 inches. Draft, 10 feet 7 inches. Horsepower, 300. Speed, 10 knots. Armament, two guns. Complement, 6 officers, 37 men. Built by W. H. Fessenden, Portland, Me., 1874. Photograph taken, 1898. Out of service.



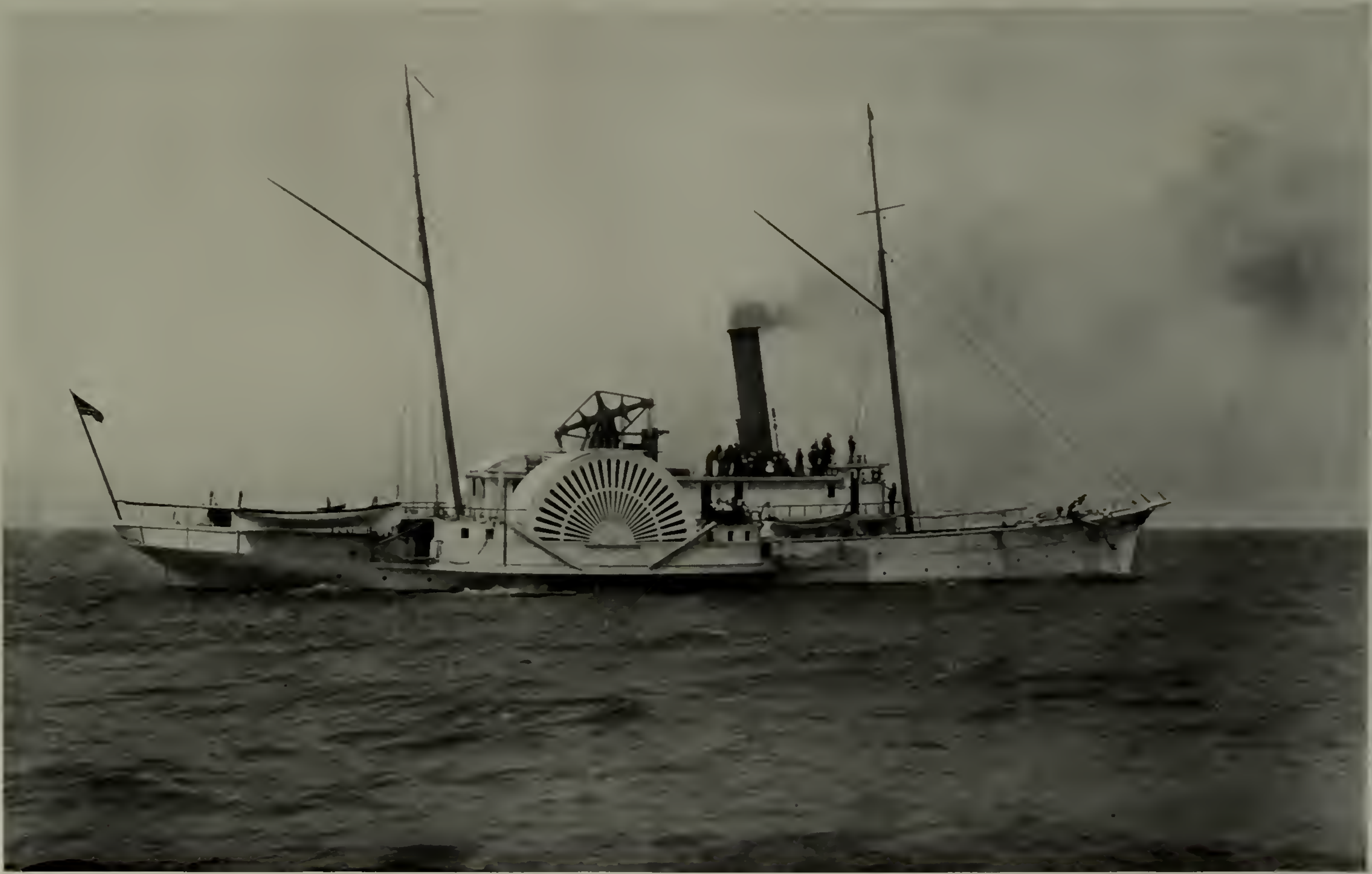
THETIS

Displacement, 1,200 tons. Length, 188 feet 6 inches. Beam, 29 feet 2 inches. Draft, 18 feet. Horsepower, 400. Speed, 10 knots. Armament, one gun. Complement, 9 officers, 58 men. Built at Dundee, Scotland, 1881. Transferred from Navy Dept., 1899. Assigned mostly to duty in the North Pacific and Arctic.



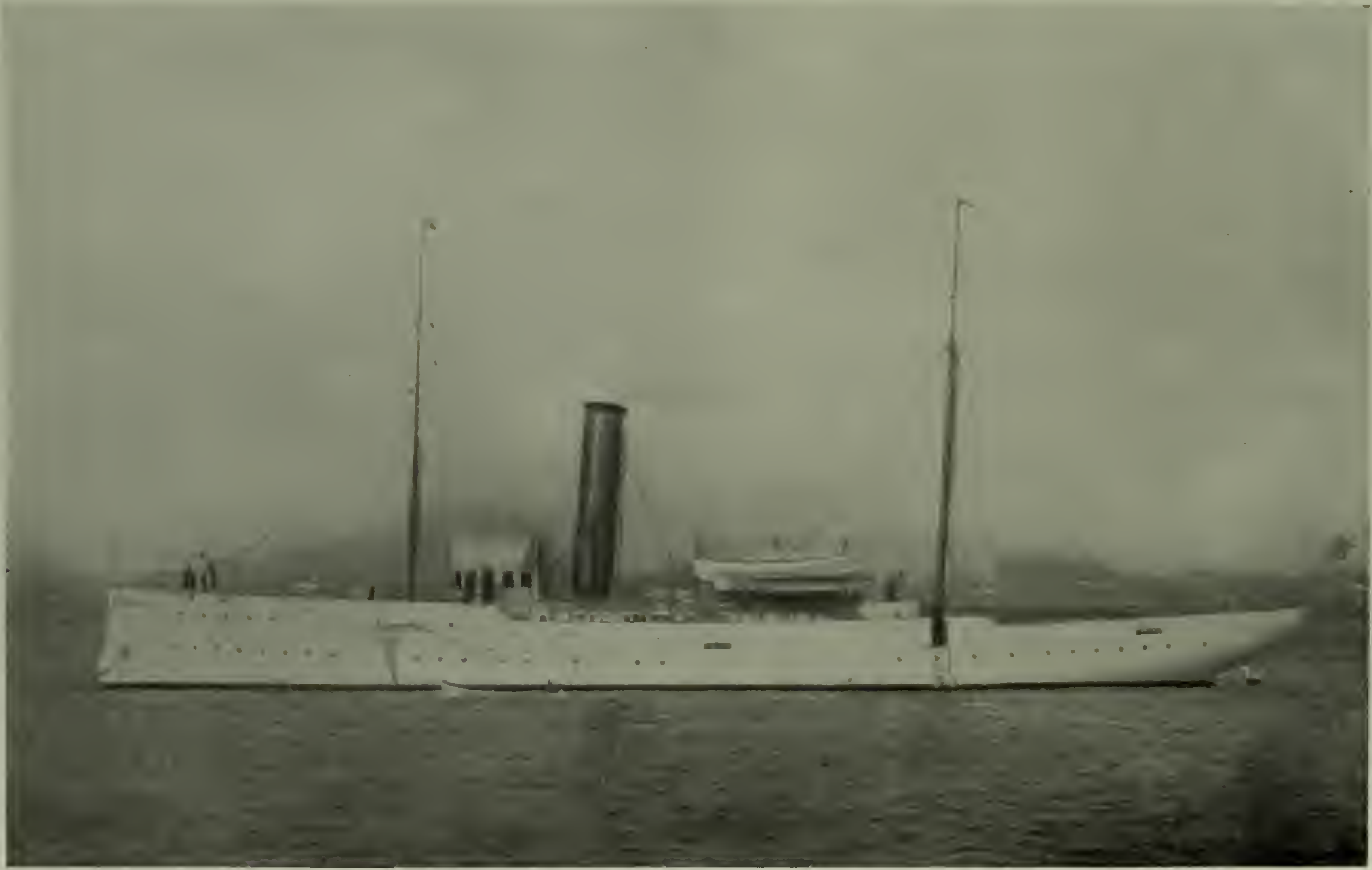
BEAR

Displacement, 1,200 tons. Length, 198 feet 6 inches. Beam, 30 feet. Draft, 17 feet 11 inches. Horsepower, 400. Speed, 10 knots. Armament, three guns. Complement, 9 officers, 58 men. Built in Greenock, Scotland, 1874. Transferred from Navy Dept., 1899. Assigned mostly to duty in regulating sealing industry and assisting whaling fleet in the Arctic.



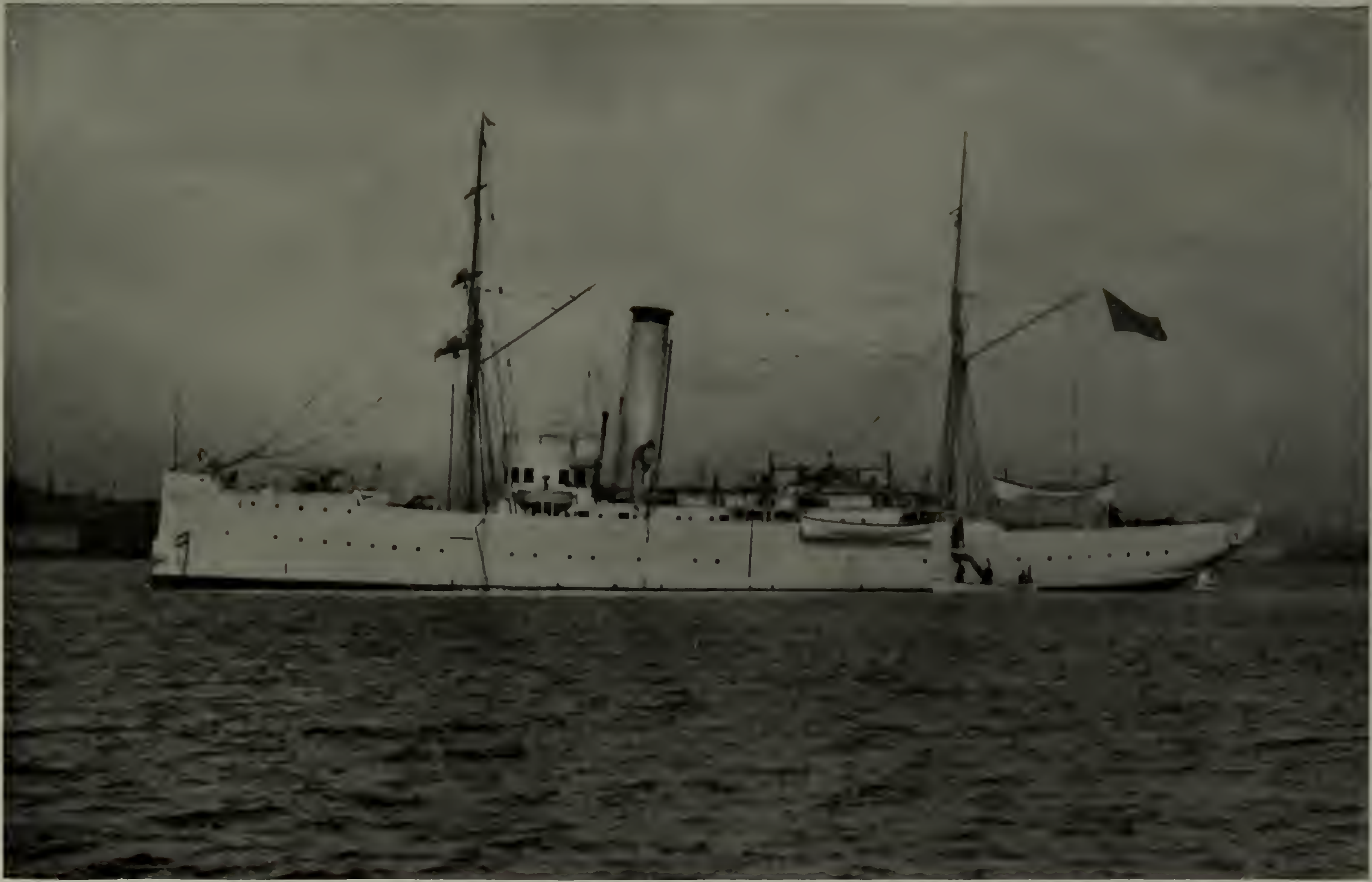
FESSENDEN

Displacement, 330 tons. Length, 191 feet 8 inches. Beam, 28 feet. Draft, 8 feet. Armament, 4 guns. Complement, 7 officers, 33 men. Built at Buffalo, N. Y., 1883. Photograph taken, 1902. Was in service on the Great Lakes.



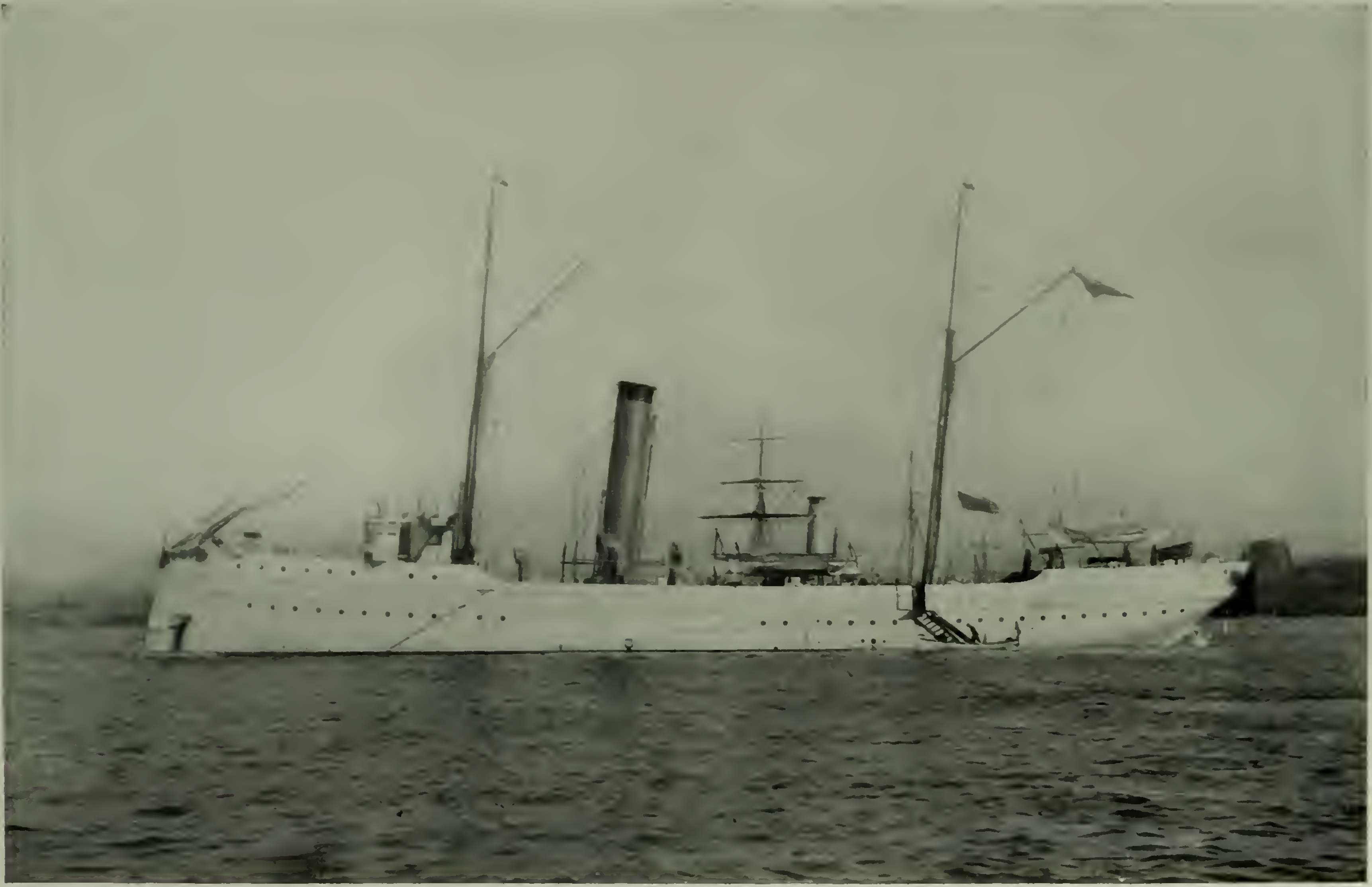
GRESHAM

Displacement, 936 tons. Length, 205 feet 6 inches. Beam, 32 feet. Draft, 11 feet 9 inches. Horsepower, 2,497. Speed, 17.53 knots. Armament, four guns. Complement, 9 officers, 63 men. Built by Globe Iron Works, Cleveland, O., 1897. Photograph taken, 1905.



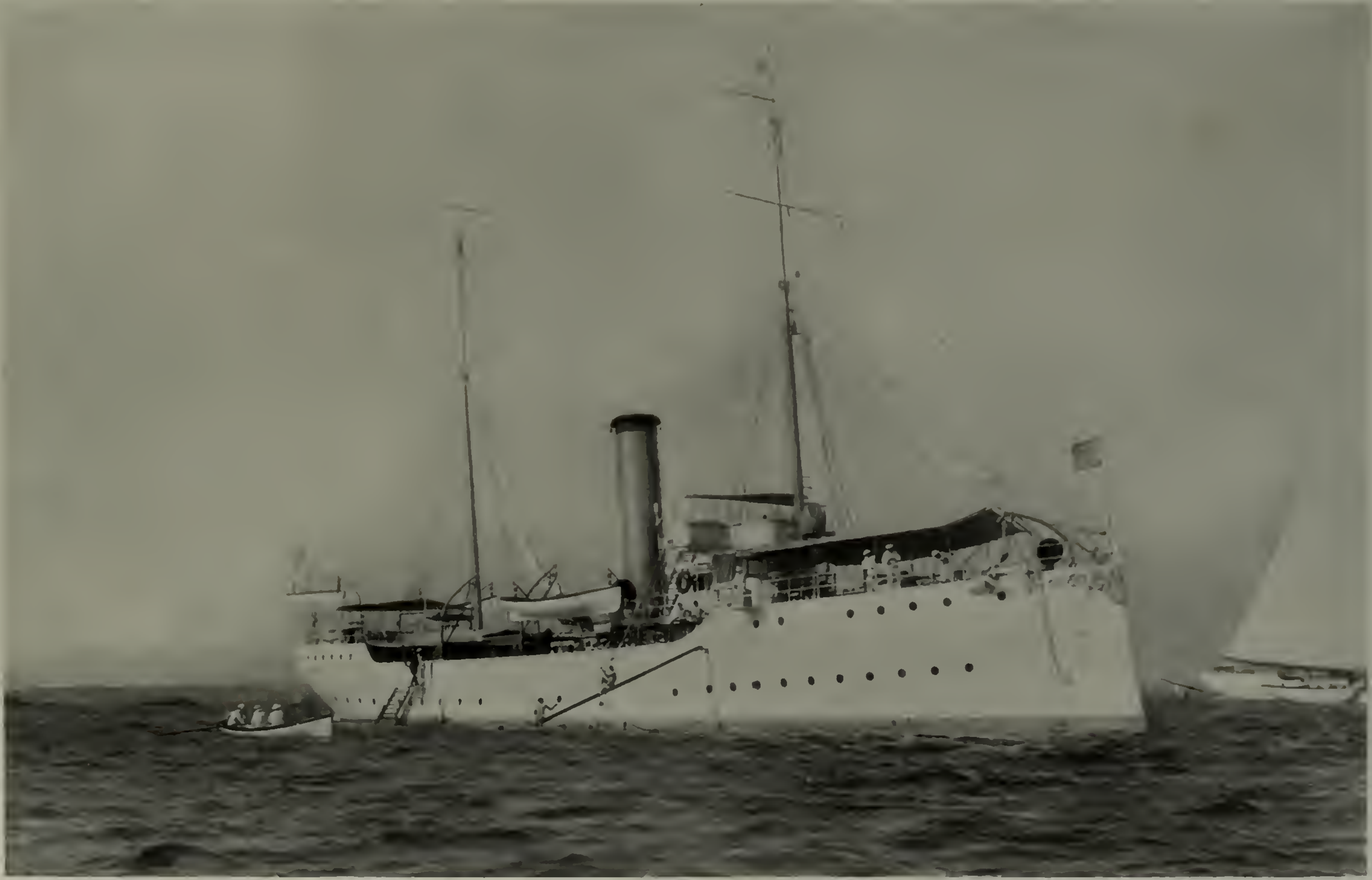
MANNING

Displacement, 962 tons. Length, 205 feet. Beam, 32 feet. Draft, 13 feet 6 inches. Horsepower, 2,395. Speed, 17 knots. Armament, four guns. Complement, 9 officers, 62 men. Built by Atlantic Works, Boston, Mass., 1897. Photograph taken, 1899.



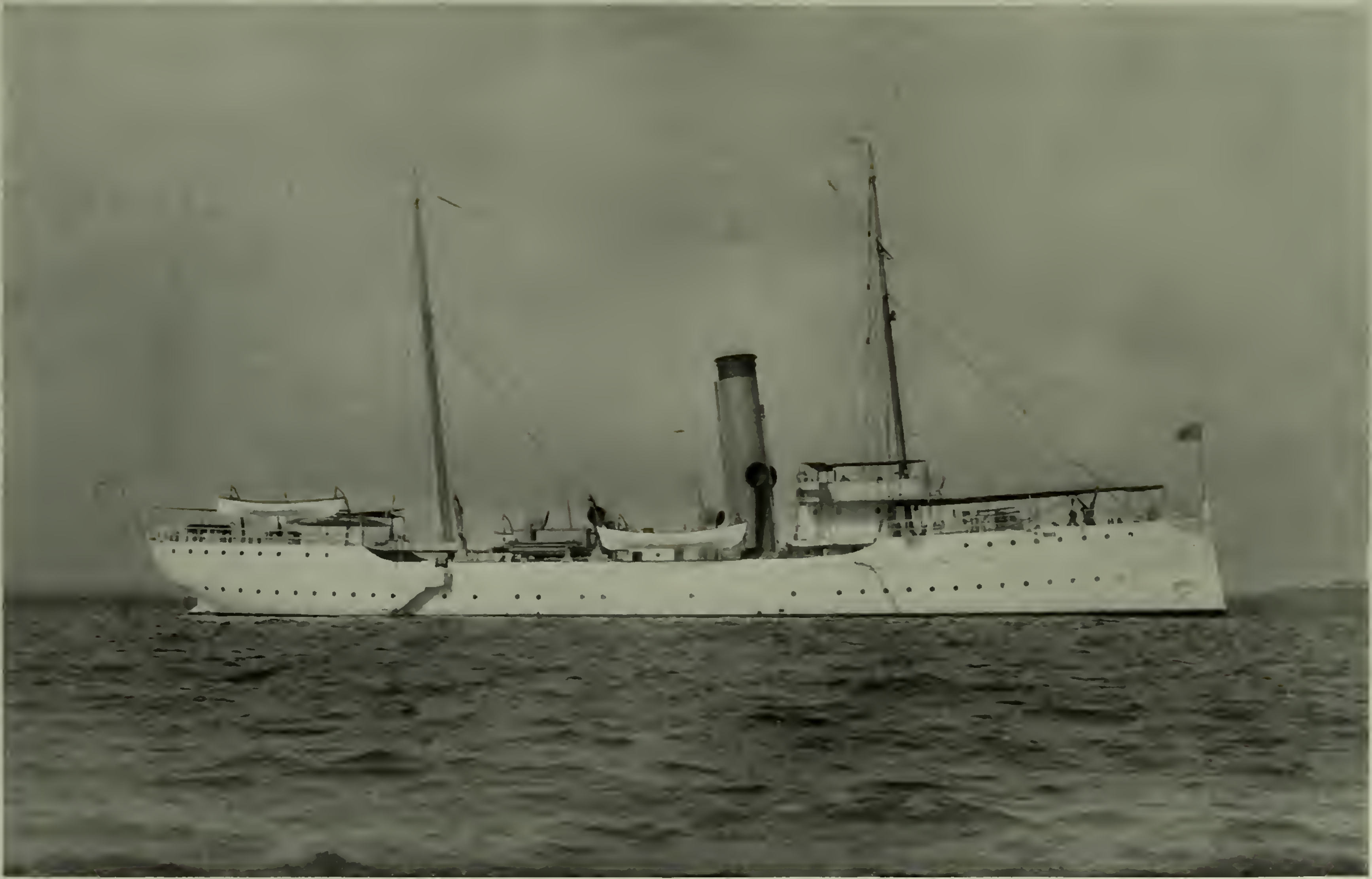
ONANDAGA

Displacement, 936 tons. Length, 205 feet 6 inches. Beam, 32 feet. Draft, 13 feet 6 inches. Horsepower, 2,380. Speed, 17 knots. Armament, four guns. Complement, 9 officers, 63 men. Built by Globe Iron Works, Cleveland, O., 1897. Photograph taken, 1899.



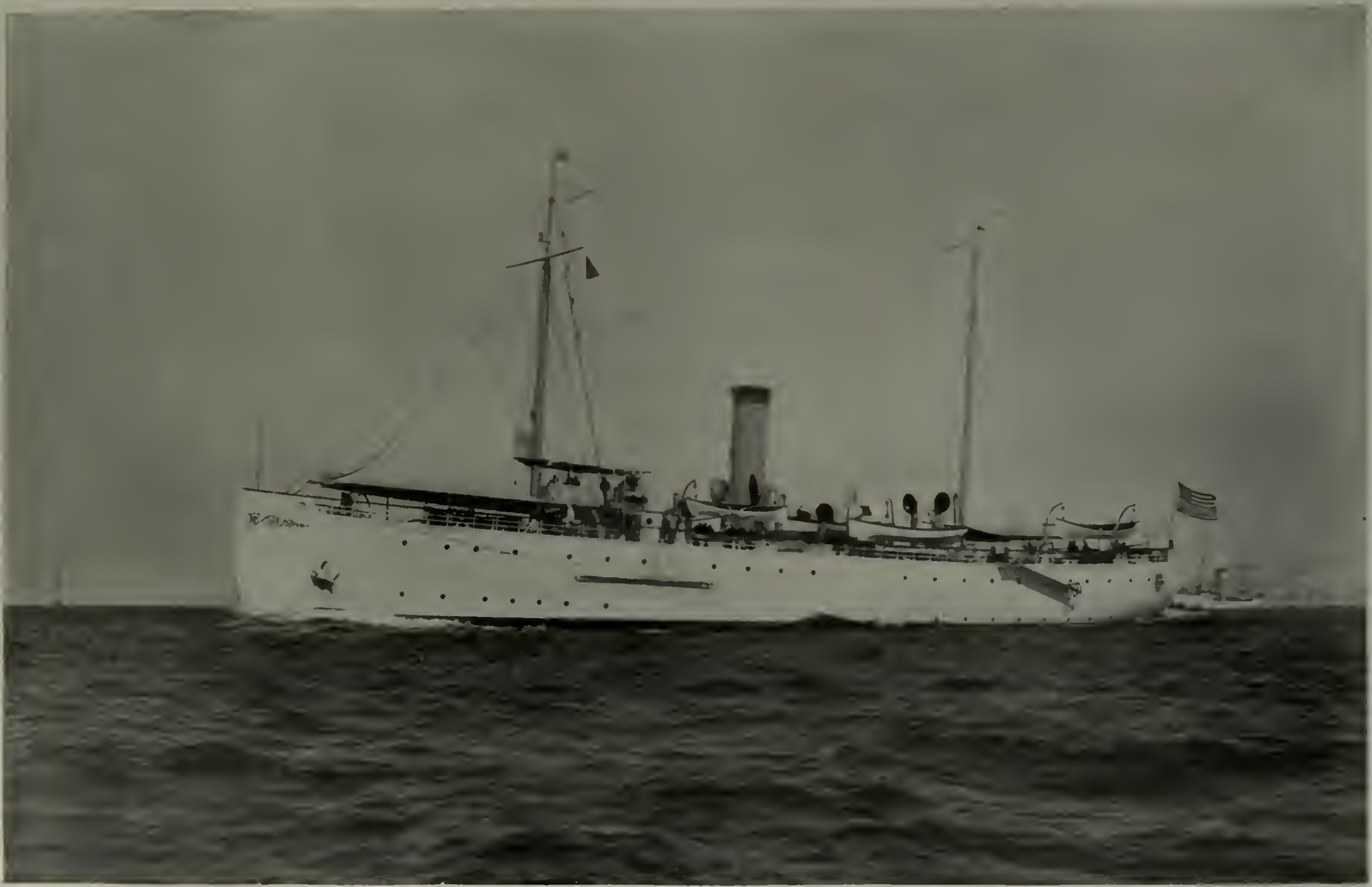
SEMINOLE

Displacement, 785 tons. Length, 188 feet. Beam, 29 feet 6 inches. Draft, 11 feet 9 inches. Horsepower, 1,675. Speed, 15 knots. Armament, four guns. Complement, 9 officers, 61 men. Built by Columbian Iron Works, Baltimore, Md., 1900. Photograph taken, 1909.



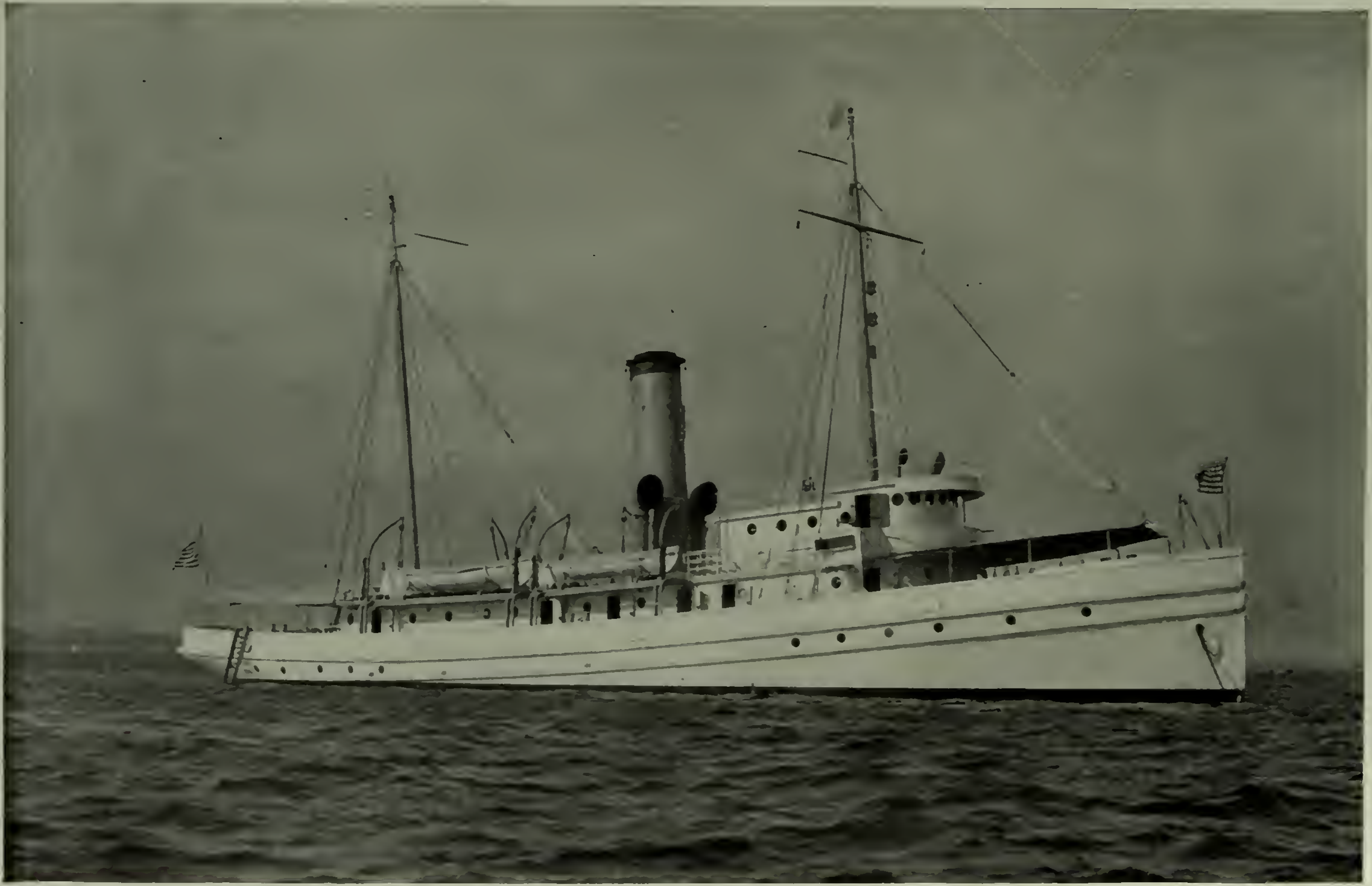
MOHAWK

Displacement, 980 tons. Length, 205 feet 6 inches. Beam, 32 feet. Draft, 11 feet. Horsepower, 2,603. Speed, 16.50 knots. Armament, two guns. Complement, 9 officers, 63 men. Built by W. R. Trigg Co., Richmond, Va., 1902. Photograph taken, 1909.



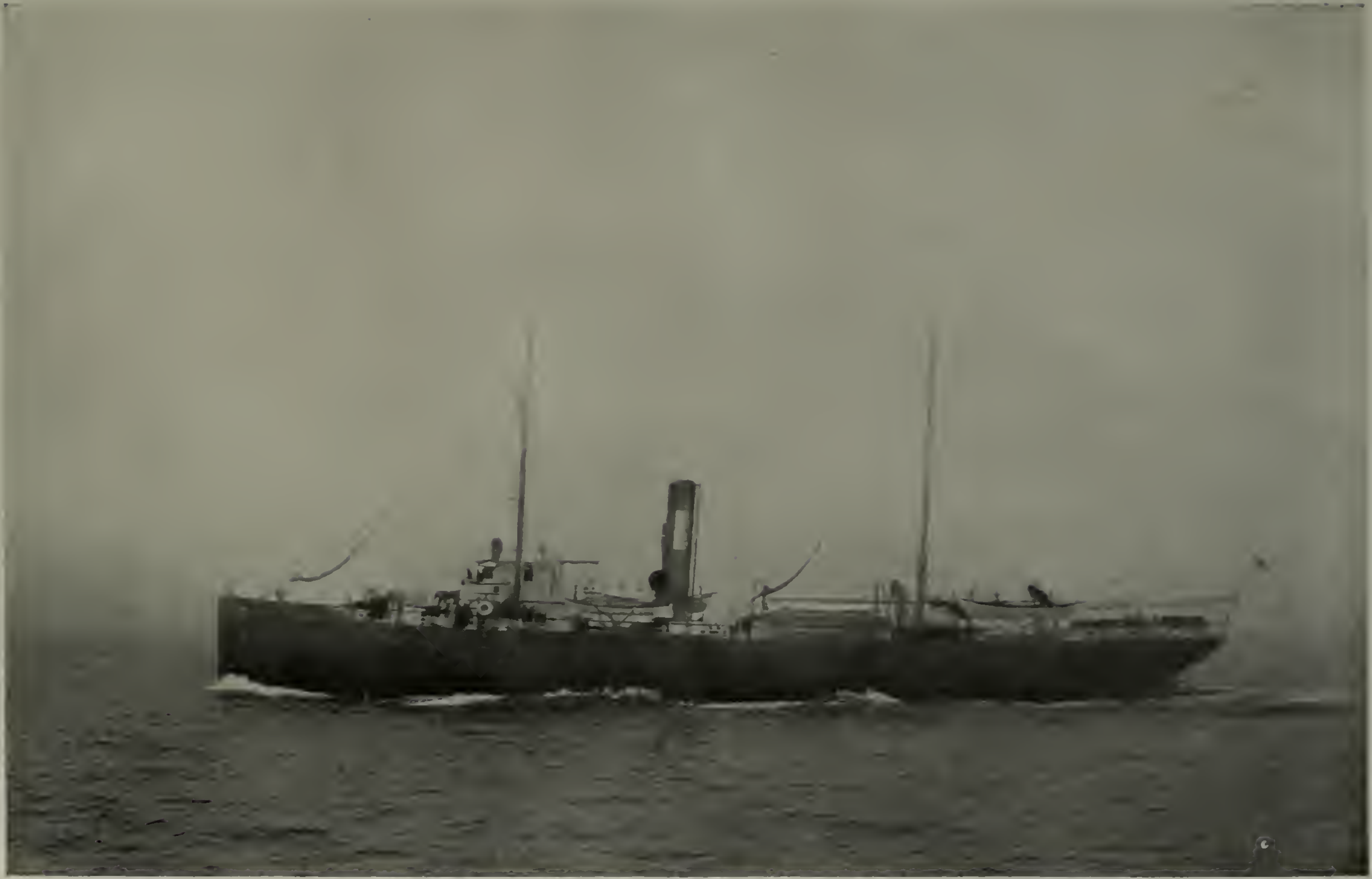
ANDROSSCOGGIN

Displacement, 1,270 tons. Length, 210 feet. Beam, 35 feet 2 inches. Draft, 15 feet. Horsepower, 1,580. Speed, 14.34 knots. Armament, four guns. Complement, 9 officers, 66 men. Built by Rodermond Bros., Tompkins Cove, N. Y., 1908. Photograph taken, 1909.



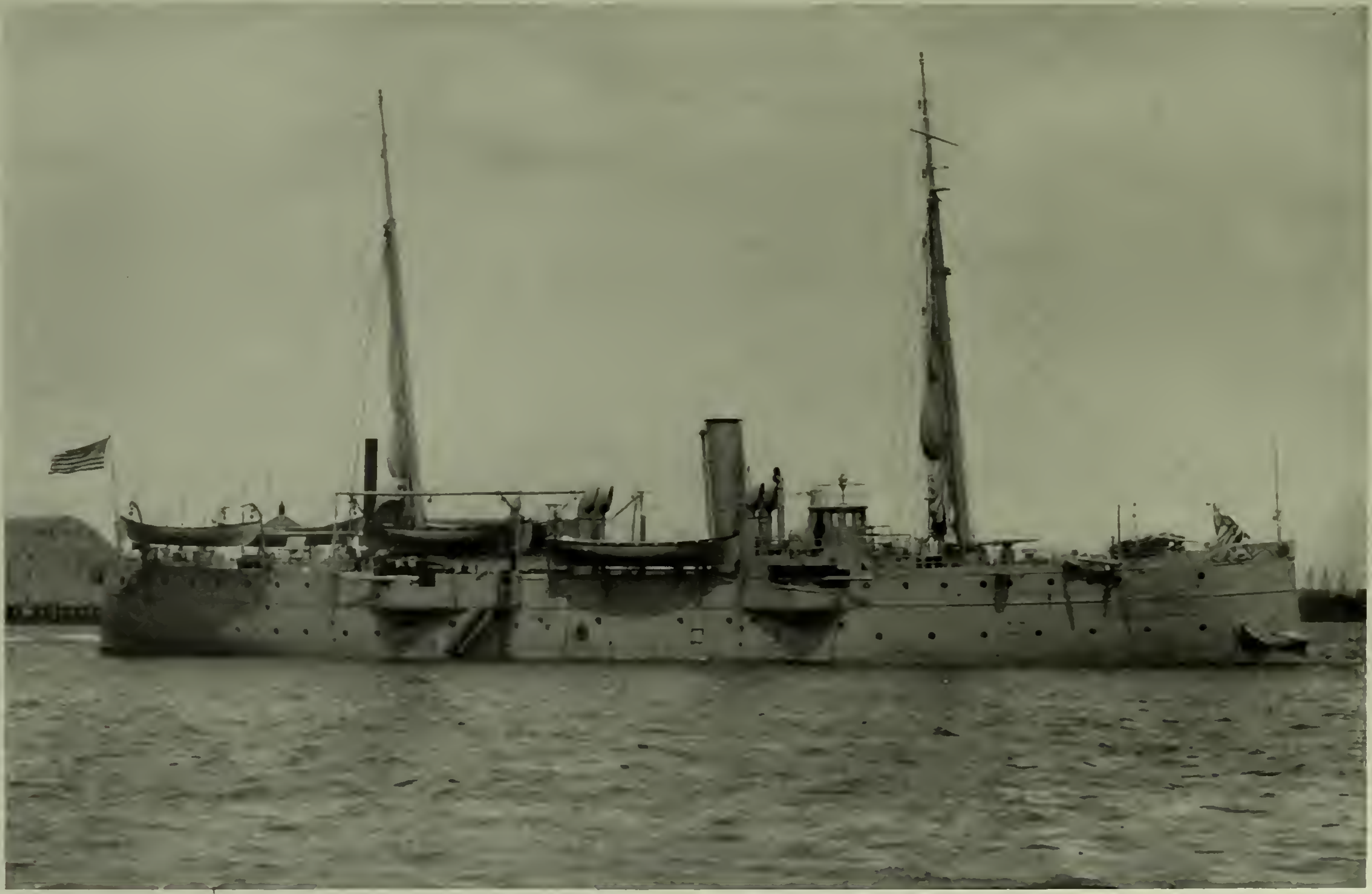
ACUSHNET

Displacement, 769 tons. Length, 152 feet. Beam, 29 feet. Draft, 12 feet. Horsepower, 1,030. Speed, 11.50 knots. Armament, 2 guns. Complement, 3 officers, 34 men. Built by Newport News Shipbuilding & Dry Dock Co., 1908. Photograph taken, 1909.



SENECA

Displacement, 1,480 tons. Length, 204 feet. Beam, 34 feet. Draft, 17 feet. Horsepower, 1,624. Speed, 12.52 knots. Armament, four guns. Complement, 8 officers, 71 men. Built by Newport News Shipbuilding & Dry Dock Co., Newport News, Va., 1908. Photograph taken, 1911. Built and fitted especially for the destruction of derelicts.



ITASCA

Displacement, 839 tons. Length, 189 feet 6 inches. Beam, 32 feet. Draft, 13 feet. Horsepower, 1,666. Speed, 15 knots. Armament, 15 guns. Complement, 8 officers, 31 men. Built by Moore & Sons, Elizabethport, N. J., 1893. Used as a practice ship. Was formerly the gunboat Bancroft. Transferred from Navy Dept., 1907. The sponsons have been removed.